

## Antioch University AURA - Antioch University Repository and Archive

---

Dissertations & Theses

Student & Alumni Scholarship, including  
Dissertations & Theses

---

2017

# The Experience of Qigong Among Women Cancer Survivors

Jennifer Sveund  
*Antioch University Seattle*

Follow this and additional works at: <http://aura.antioch.edu/etds>



Part of the [Alternative and Complementary Medicine Commons](#), [Clinical Psychology Commons](#), [Gender and Sexuality Commons](#), [Mental and Social Health Commons](#), [Oncology Commons](#), and the [Women's Studies Commons](#)

---

### Recommended Citation

Sveund, Jennifer, "The Experience of Qigong Among Women Cancer Survivors" (2017). *Dissertations & Theses*. 378.  
<http://aura.antioch.edu/etds/378>

This Dissertation is brought to you for free and open access by the Student & Alumni Scholarship, including Dissertations & Theses at AURA - Antioch University Repository and Archive. It has been accepted for inclusion in Dissertations & Theses by an authorized administrator of AURA - Antioch University Repository and Archive. For more information, please contact [dpenrose@antioch.edu](mailto:dpenrose@antioch.edu), [wmcgrath@antioch.edu](mailto:wmcgrath@antioch.edu).

THE EXPERIENCE OF QIGONG AMONG WOMEN  
CANCER SURVIVORS

A Dissertation

Presented to the faculty of  
Antioch University Seattle  
Seattle, WA

In Partial Fulfillment  
of the Requirements of the Degree  
Doctor of Psychology

By  
Jennifer S. Sveund

May 2017

# THE EXPERIENCE OF QIGONG AMONG WOMEN CANCER SURVIVORS

This dissertation, by Jennifer Sveund, has  
been approved by the committee members signed below who  
recommend that it be accepted by the faculty of the Antioch University  
Seattle at Seattle, WA in partial fulfillment of requirements for the  
degree of

DOCTOR OF PSYCHOLOGY

Dissertation Committee:

---

Jude Bergkamp, Psy.D.  
Chairperson

---

Amy Davis, Psy.D.

---

Tricia Teneycke, Psy.D.

---

Date

**©Copyright by Jennifer Sveund, 2017**

**All Rights Reserved**

## ABSTRACT

### THE EXPERIENCE OF QIGONG AMONG WOMEN CANCER SURVIVORS

Jennifer Sveund

Antioch University Seattle

Seattle, WA

Research has shown that qigong can be beneficial for a variety of health related conditions; However, evidence suggests that in the United States, a lack of well designed clinical trials limits the efficacy of qigong in the context of cancer treatment. Research has indicated that careful consideration should be given to the design of randomized control trials using qigong due to the conflicting philosophical methodologies. In the United States, qigong has been under investigated, particularly lacking are qualitative inquiries into qigong use and cancer survivorship. This study is an interpretative phenomenological inquiry that sought to understand women's experience of qigong in the context of cancer survivorship in the United States. The study included twelve adult women at various phases of cancer survivorship. Participants provided interviews related to their experience. The qualitative interpretative phenomenological methodology provided a framework through which a deeper understanding of the lived experience of the participants could be achieved. Thus, a deeper insight was gained into the shared meaning of qigong use in the lives of women who have lived with cancer. This dissertation is available in open access at AURA, <http://aura.antioch.edu/> and Ohio Link ETD Center <https://etd.ohiolink.edu/etd>.

*Keywords:* Qigong, women, cancer, interpretative phenomenological, United States

## **Acknowledgements**

The dissertation process has been a long journey to which many have offered inspiration and contributions. Special thanks to my committee members Dr. Jude Bergkamp, Dr. Tricia Teneycke, and Dr. Amy Davis for their patience, insight, and guidance; to Christopher Bonnichsen for introducing me to the practice of soaring crane qigong; to my wonderful and inspiring qigong teacher, Dennis Cole; and to my friends and family for their ongoing support. A very special thanks to the individuals who participated in this study for their courage and the generous contribution of intimate life experience that made this research possible.

<u>Table of Contents</u>	<u>Page</u>
Acknowledgements.....	v
List of Tables .....	viii
Introduction.....	1
Definition of Cancer Survivor .....	2
Definition of Mind-in-Body.....	2
Literature Review.....	3
Cancer Definition and Explanation of Staging .....	3
Cancer Statistics.....	4
Cancer Etiology .....	5
Allopathic Approaches to Cancer Treatment.....	6
Cancer Treatment Related Impacts.....	8
Quality of Life of Older Women Related to Cancer Treatment .....	13
Complementary, Alternative, and Integrative Practices .....	14
Traditional Chinese Medicine.....	18
Qigong.....	21
Medical Qigong .....	22
Purpose.....	27
Methods and Research Design.....	28
Methods Rationale .....	29
An Overview of Interpretative Phenomenological Analysis (IPA) .....	29
Data Analysis .....	36
Member Checking.....	40

Role of the Researcher .....	41
Results .....	43
Domain A: The Initial Impacts of Cancer Diagnosis.....	44
Domain B: Experiences of Cancer Treatment .....	46
Domain C: Post Treatment and “Getting Back to the New Normal” .....	50
Member Checking Results .....	53
Discussion .....	53
Domain A: The Initial Impacts of Cancer Diagnosis .....	53
Domain B: Experiences of Cancer Treatment .....	54
Domain C: Post Treatment and “Getting Back to the New Normal” .....	56
Limitations .....	57
Implications for Clinical Practice and Research .....	58
Conclusion .....	61
References .....	63
Appendix A: Code Cloud.....	73
Appendix B: Code Application.....	75
Appendix C: Permissions.....	77
Appendix D: Process Art .....	79
Relationship to Qigong .....	80
Relationship to Cancer .....	81
Researcher Reflections.....	82



<u>List of Tables</u>	<u>Page</u>
1. Phases of Thematic Analysis.....	39
2. Domains and Themes.....	4

## **Introduction**

Research has shown that qigong can be beneficial for a variety of health-related conditions. However, evidence suggests that in the United States, a lack of well-designed clinical trials limits current understandings of the efficacy of qigong in the context of cancer treatment (Lee, Chen, Sancier, & Ernst, 2007). Research has also indicated that, due to conflicting philosophical methodologies, careful consideration should be given to the design of randomized controlled trials using qigong (Ai, 2003). In the United States, qigong has been under examined, particularly in terms of the qualitative inquiries exploring qigong use and cancer survivorship.

This study consists of an interpretative phenomenological inquiry that seeks to understand women's experience of qigong in the context of cancer survivorship in the United States. The study included twelve adult women who provided interviews related to their experience of qigong in the context of cancer survivorship. The qualitative interpretative phenomenological methodology provided a framework through which a deeper understanding of the lived experience of the participants could be achieved, thus providing a deeper understanding of the impact of qigong in the lives of women who have lived with cancer.

The literature review first defines terms used in this study, including cancer. Next, it explores cancer treatment from Western as well as Eastern perspectives, situating the study in a current historical context by including a brief discussion of conventional Western medical approaches as well as a more in-depth review of Traditional Chinese Medicine and Qigong. Particular attention was given to the demographic of older women to provide context for the participants in the study. The review also examines the recent movement toward complementary and integrative approaches in oncology in the United States.

Results of this research suggest that women have shared in an overall positive experience of qigong, which allowed them to cope with cancer treatment and develop relationship with areas of their bodies that had been changed by cancer. Women expressed a shared sense of gratitude and empowerment, and some went so far as to attribute their overall survival to use of qigong. It is hoped and intended that this exploration of the experience and use of qigong in dealing with cancer will facilitate future research on the topic.

### **Definition of Cancer Survivor**

The MD Anderson Center of the University of Texas (2014) defines cancer survivor as “anyone with a cancer diagnosis. Survivorship starts at the time of disease diagnosis and continues throughout a person’s lifetime.” The term “cancer survivor” is defined in this way because of the inclusivity of the term. Cancer survivor, for the purposes of this research, includes women at all stages of cancer diagnosis, treatment, recovery, and remission. This term is not meant to place a label on women who may not identify with the word “survivor,” but rather to capture the breadth of women with cancer included in this study.

### **Definition of Mind-in-Body**

Mainstream terminology in the literature generally refers to practices such as qigong, tai chi, and yoga as “mind-body” practices. For the purposes of this study, however, I have chosen to refer to qigong as a “mind-in-body” practice, based on ethnographic research conducted by Kerr (2002). In her research, Kerr (2002) examined a Western biomedical clinical trial that involved qigong, exploring perspectives of the biomedical team and qigong master regarding the role of qigong in the clinical trial. In part, she addressed important variations in how the practice of qigong is understood. Kerr (2002) indicated that Western biomedical teams referred to qigong as a “mind *and* body” practice. Conversely, Kerr indicated that the qigong master referred to it as a “mind-*in*-body practice. This important distinction helps capture the essence of qigong

practice. For the purposes of this research, “mind-in-body” rather than “mind-body” or “mind and body” will be used to characterize such practices as qigong.

## **Literature Review**

### **Cancer Definition and Explanation of Staging**

In order to capture the experience of qigong among women cancer survivors, it is important to define cancer and provide a general description of the disease. Cancer is made up of various diseases that can impact any part the body (World Health Organization, 2016). When cancer occurs, a single cell transforms into an abnormal cell, with the division of such abnormal cells spreading to other tissues in the body via the blood and lymph systems in a multi-stage process (National Institute of Cancer, 2014; World Health Organization, 2016). Specific types of cancer are identified based on where the cancer originated in the body as well as by the type of cancer cell. The severity of cancer is measured in stages, which help to guide treatment and determine prognosis. Cancer staging can change over time, and different types of staging exist for different types of cancer. The majority of cancer staging is based on criteria such as (1) the size of the primary tumor as well as the site and type of cancer cell, (2) whether cancer cells have spread to nearby lymph nodes and the number of tumors present, and (3) whether the cancer cells have spread to other areas of the body, a process known as metastasis.

Stage 0 indicates the presence of re-invasive cancer cells, known as “in situ,” which have not yet invaded surrounding tissue but have the potential to become a form of cancer (American Cancer Society, 2016). Stages I (localized), II (regional), and III (distant) are indicators of tumor size and the degree to which the cancer has spread beyond its place of origin to nearby lymph nodes, tissues, or organs. The higher the stage, the more advanced the disease. Stage IV indicates that cancer has spread beyond nearby tissues, lymph nodes, and/or organs to distant areas of the body (American Cancer Society, 2016). Stages of cancer are assessed by several

methods, including physical exams, x-rays, computed tomography (CT) scans, magnetic resonance imaging (MRI) scans, and positron emission tomography (PET) scans, biopsy and cytology reports, and surgery (National Institute of Cancer, 2014).

According to Twite (2007) tumors may be benign or malignant. Benign tumors, or neoplasms, do not have the ability to metastasize to different sites in the body and generally grow slowly. Malignant tumors grow more rapidly and can spread to surrounding areas.

### **Cancer Statistics**

In 2015, according to the Center for Disease Control and Prevention (CDC), roughly 14 million people diagnosed with cancer were living in the United States. In 2016, the CDC expected approximately 843,800 new cases of cancer to be diagnosed among women, with breast, digestive, and respiratory cancers being more prevalent among women than other forms. Among women, white women have the highest rates of cancer diagnosis, while black women have the highest rates of cancer deaths. Leading causes of cancer deaths among women include lung cancer, breast cancer, and colorectal cancer. Underserved populations and racial/ethnic minorities are more likely to be diagnosed at later stages and thus experience shorter survival rates (Center for Disease Control and Prevention, 2015).

In the U.S., cancer is the leading cause of death in women between the ages of 30 and 64 years and the second leading cause of death in women age 65 and older (Center for Disease Control and Prevention, 2013). Between 2005 and 2009 in the U. S., women of all races between the age of 65 and 75 were more commonly diagnosed with urinary, uterine, ovarian, and genital cancers, as well as Hodgkin lymphoma, myeloma, leukemia, mesothelioma, and digestive, respiratory, and skin cancer, as compared to women in other age groups (Howlader et al., 2015). Age constitutes an important factor when considering risk for many forms of cancer, but it is one of the strongest risk factors for developing breast cancer in particular, increasing as

age progresses (Kelsey, Gammon, & John, 1993; National Cancer Institute, 2014). Due to the increasing population of older women in the U.S., elderly women are expected to comprise an increasingly important focus in geriatric oncology (Kurts & Defour, 2002).

### **Cancer Etiology**

Cancer is a complex disease having many possible causes and being linked to a range of factors that may contribute to its onset and development. Capturing this complexity in its entirety extends beyond the scope of this particular research; however, it is worth noting some of the main areas of cancer etiology to help situate the current study within the context of cancer survivorship.

According to the American Cancer Society (2016), age, family history, tobacco use, physical activity, diet, and radiation exposure are some of the main factors that can impact an individual's risk for developing cancer. As people age, their risk for developing cancer increases (American Cancer Society, 2016); however, research has indicated that people often do not recognize advanced age as a risk factor, more often perceiving cancer risk as a constant at any age (Taber, Klein, Suls, & Ferrer, 2016). Furthermore, among women, obesity has been shown to increase the risk of developing cancer, a factor in turn connected with age. Researchers have determined that the longer obesity is present during adulthood, the greater the risk for several forms of cancer, particularly endometrial cancer (Arnold et al., 2016). Also linked to increased cancer risk, research has found, is compromised immune functioning. For example, decreased immune functioning following surgery or as a result of medication has been frequently detected among older populations (Twite, 2007), which increases their susceptibility to cancer. Diet also plays a role in increasing the risk of developing cancer. For example, Peres et al. (2016) found the consumption of a pro-inflammatory diet among African American women to be associated with higher ovarian cancer risk, particularly for women of ages 60 years and older.

Women's familial history can also reflect the likelihood that cancer will develop. According to Twite (2007), women who have a familial history of mothers, sisters, aunts, or grandmothers diagnosed with breast cancer are frequently at an increased risk for developing the disease. Genes such as the human epidermal growth factor, also known as the HER-2/*neu* gene, have been found to play a major role in some types of breast cancer, and their heredity is recognized as a risk factor for developing breast cancer. Among women, fluctuations or changes in hormones may also influence the development of reproductive cancers (Twite, 2007).

Exposure to various forms of carcinogens can increase the risk for developing cancers. In the United States, tobacco smoking has been shown to increase both cancer risk and cancer-related deaths among both men and women. Many researchers have found this correlation particularly evident in the southern states within the U.S. (Lortet-Tieulent et al., 2016). Evidence suggests that ionizing radiation, as observed among atomic bomb survivors, correlates to the formation of leukemia, breast, thyroid, lung, and various other forms of cancer. Ultraviolet light or sunlight can play a role in the development of skin cancer, and oncogenic viruses such as the human papilloma virus have also been linked to ovarian cancer (Twite, 2007).

Just as many causes and factors contribute to the onset of cancer, a broad spectrum of oncological and integrative treatments are available to target, slow the progression of, and/or alleviate cancer.

### **Allopathic Approaches to Cancer Treatment**

Cancer treatments can vary in approach and duration, frequently involving a combination of approaches. Conventional forms of cancer treatment in Western medicine include surgery, radiation therapy, chemotherapy, hormone and/or anti-hormone therapy, biotherapy, and targeted therapies (Twite, 2007; World Health Organization, 2016).

Surgery is typically preferred for tumor removal; however, if a tumor is inoperable, other

forms of treatment are advised, such as radiation therapy (Twite, 2007). According to Twite (2007), radiation therapy can be employed as both a pre- or post-operative treatment, as well as for palliative care in more advanced cancers. Radiation therapy functions to indirectly ionize cancer cells, thus inhibiting their division, while chemotherapy allows cancer drugs to work directly at the site of the tumor and can be used as adjunctive therapy in combination with other forms of treatment. Drugs have been developed which actively target cancer cells while avoiding normal cells. Hormone therapy works differently than other forms of treatment, changing hormone levels within the body and thus making it more difficult for certain types of cancer cells to thrive. Biotherapy is a newer form of cancer treatment that works with the immune system by helping to change the immune system's response to cancer (Twite, 2007).

Age comprises an important factor in decisions surrounding a cancer patient's treatment. Balducci, Extermann, and Carreca (2001) investigated the management of cancer in women with breast cancer.

Patient age may affect all areas of cancer management, including postoperative radiation after partial mastectomy, axillary dissection, the primary treatment of localized breast cancer with tamoxifen, chemotherapy and hormonal therapy in the adjuvant treatment of breast cancer, and the management of the frail patient with metastatic disease. (p. 430)

Research has found breast cancer to be one of the most common forms of cancer among Western women, and has also revealed that the management of treatment for women with breast cancer is largely under investigated in older women as compared to their younger counterparts (Gennari & Audisio, 2008). Furthermore, women with cancer who are age 65 or older are substantially underrepresented in studies of treatment for cancer (Hutchinson, Unger, Crowley, Coltman, & Albain, 2014; Kemeny et al., 2003; Kurtz & Dufour, 2002).



## **Cancer Treatment Related Impacts**

According to the University of Texas MD Anderson Center (2014), cancer survivors experience significant side effects from conventional treatment, the impacts of which are not only extensive but long lasting. Cancer side effects often include physical, social, emotional, and financial impacts which intersect with one another and contribute to challenges in the overall quality of life for women living with cancer.

**Physical side effects.** The physical side effects of cancer treatment are often overwhelming. Many women experience a decline in physical functioning, such as decreased physical activity, due to the medicalization of their lives and uncomfortable side effects of treatment (Vilhauer, 2008). Physical impacts of cancer treatment can be extensive, including but not limited to the following: dental erosion from chemotherapy, gum disease from radiation therapy, development of diabetes from steroid use, dry mouth, loss of appetite, and throat or mouth ulcers (MD Anderson Center, 2014). Endocrine changes can result from treatments that target hormones, bringing muscular atrophy, anemia, weight loss, loss of hair, and memory loss. Additional physical side effects may also include hypothyroidism, lymphedema or damage to the lymph nodes, neuropathy, damage to organs such as the liver from chemotherapy, premature aging, and various levels of pain (MD Anderson Center, 2014). Research has shown that the prevalence of chronic pain following cancer diagnosis to be greater among women as compared to men, and that pain has been experienced with greater intensity among African-Americans (Green, Hart-Johnson, & Loeffler, 2011).

Pain and fatigue emerge as the two most common physical side effects impacting cancer survivors (Jacobsen & Andrykowski, 2015). Women frequently experience feelings of exhaustion or fatigue; cancer related fatigue is prevalent across variety of cancer diagnoses and can profoundly impact quality of life (Hofman, Ryana, Figueroa-Moseleya, Jean-Pierrea, &

Morrowa, 2007). In a quantitative study including 1,957 breast cancer survivors, researchers found that psychological factors comprised a stronger predictor than medical factors for the development of fatigue. Findings suggested that depression rather than cancer treatment constituted a stronger predictor of fatigue and concluded that screening for psychological distress and depression is important for patients suffering from fatigue (Bower et al., 2000). Impacts of psychosocial factors in cancer survivorship can be extensive and are likewise an important consideration to both understand the experience and address the needs of women cancer survivors. Research has shown that psychological counseling (Trijsburg, van Knippenberg, & Rijpma, 1992) as well as physical exercise (Knols, Aaronson, Uebelhart, Fransen, & Aufdemkampe, 2005) can be helpful while undergoing treatment and after cancer treatment.

**Psychosocial impacts.** Research suggests that psychosocial factors can impact overall distress experienced by cancer survivors. According to Andreu et al. (2012), during diagnosis and while undergoing treatment for cancer, psychosocial factors were more likely than medical factors to contribute to distress. For example, ineffective coping styles posed a significant risk factor for emotional distress, whereas social support and healthy coping styles constituted protective factors. Emotional distress has been shown to impact quality of life; for some, this distress begins prior to diagnosis. Evidence suggests that distress begins at the time of evaluation and/or screening, when cancer is merely suspected (Moseholm et al., 2016).

Emotional forms of distress such as depression and hopelessness are common among persons living with cancer and can be exacerbated by attempts to suppress emotions. Research has shown that coping through the expression of emotion can lead to greater quality of life, decrease in distress levels, and better physical health in breast cancer survivors (Stanton et al., 2000). Research also indicates that during cancer, some women feel a sense of powerlessness due to feeling a loss of control over their lives; however, Hulett, Armer, Stewart, and Wanchai,

(2015) conducted research that has shown that some women breast cancer survivors experienced a positive shift in worldview and self-empowerment. The researchers indicated that complementary and alternative practices such as meditation, positive affirmations, and prayer may reduce stress and support self-empowerment (Hulett et al., 2015).

During cancer treatment, survivors often experience fears associated with undergoing cancer treatment regimens as well as fears related to the recurrence of cancer following treatment (MD Anderson Center, 2014). Fear of recurrence can impact women's lives for many years following remission (Fallowfield & Jenkins, 2015). In a qualitative study conducted by Villhauer (2008) including 14 Caucasian women with metastatic breast cancer, Villhauer found that women cancer survivors experienced fears of illness progression and impacts of the disease on their future, along with fears of dying. Grief can often accompany fear as many cancer survivors struggle with feelings of loss related to faith in their health, perceptions of their physical body, and/or changes in their quality of life (MD Anderson Center, 2014).

For some, stressors and fears associated with cancer survivorship can manifest as psychiatric disorders. Cancer survivors are at a greater risk of experiencing psychological distress and psychiatric disorders including anxiety, depression, and post traumatic stress (Mehnert & Koch, 2008; Miller & Massie, 2006). In a comparative analysis, Jacobsen and Andrykowski (2015) found that individuals undergoing cancer diagnosis and treatment experienced elevated symptoms of depression and anxiety when compared to normative populations. According to the MD Anderson Center (2014), approximately 70% of cancer survivors experience depression, although side effects of treatment, such as insomnia, weight loss, inability to concentrate, and fatigue, can mimic symptoms of depression. As a result, it can often be difficult to distinguish between symptoms of actual depression, cancer related side effects, and/or a mixture of the two.

**Relational, spiritual, and cognitive impacts.** The physical and psychosocial repercussions of cancer can also impact relationships with friends, family, and co-workers (National Cancer Institute, 2015). Treatment for cancer can result in physical body changes that can impact body image, sexuality, and self-esteem, with emotional repercussions which can in turn impact relationship, dating, and intimacy (MD Anderson Center, 2014; NCI, 2014), culminating in a profound impact on how women relate to their bodies and sexuality. Often inadequately considered in cancer assessment, planning, or patient education, impacts on sexuality should be given greater focus (Pelusi, 2006). Much of the research conducted on women cancer survivors' relationship to their bodies has focused on breast cancer. Boquiren, Esplen, Wong, Toner, and Warner (2013) found that women breast cancer survivors who had reported previous issues with internalized traditional gender roles and attitudes, body shame, and elevated self-surveillance behavior experienced greater distortions related to body image and appeared to be at increased risk for psychological distress following cancer treatment. In a qualitative study including 11 breast cancer survivors, Brunet, Sabistan, and Burke (2013) found that women, described themselves

as an object to be viewed, and saw their bodies as a means to show others how they felt inside and control how others perceived, evaluated, and treated them. Further, the external representation of their bodies was critical to the women in terms of social acceptance since they believed that people hold assumptions and prejudices about others based on appearance. (p. 349)

Research indicates that a broad spectrum of emotions related to negative body image can persist in women long after cancer treatment has concluded. In a cross-sectional survey, Patel-Kerai, Harcourt, Rumsey, Naqvi, and White (2016) gathered data from a sample of 173 women breast cancer survivors, including South Asian, Black, and White women. The researchers found

that, when compared with White women, South Asian, and Black women experienced elevated levels of body image issues while South Asian women experienced greater levels of anxiety. The researchers also discovered cross-cultural variations related to women's connection with spirituality during cancer, finding that both Black and South Asian women were more likely to locate their well-being in the hands of a higher power, such as God (Patel-Kerai et al., 2016), which suggests spirituality can play a major role in how women perceive and experience cancer.

For many, life can take on new meaning during and after cancer. Spirituality may increase quality of life for cancer survivors by providing a social support network and increased adaptive coping (MD Anderson Center, 2014). Cancer can result in personal growth for survivors and their families: "In the presence of this disease, people step past lifelong limitations and may come to know themselves and recognize their capacities for the first time" (Remen, 2008, p. 770).

In addition to reporting spiritual and relational changes, women cancer survivors have also reported suffering from cognitive impairment (Fallowfield & Jenkins, 2014; Wieneke & Dienst, 1995), memory loss, and changes in ability to concentrate following cancer treatment (Stanton, Rowland, & Ganz, 2015). Many report fears related to their profession, such as losing their job or lacking sufficient energy to get through the day. The cancer-related fatigue commonly experienced by cancer patients can have negative impacts on daily functioning and quality of life, in conjunction with increasing financial worries (Hofman et al., 2007).

**Financial impacts.** Cancer treatment in the U.S. imposes a significant financial burden on most cancer survivors. For people without health insurance, the first year of cancer treatment can cost between \$100,000 and \$200,000, depending on the type of cancer, with treatment for leukemia or lymphoma costing most. Families may struggle if the primary wage earner is

diagnosed with cancer. Some cancer survivors have no choice but to retire early, though doing so costs them crucial benefits such as health insurance (MD Anderson Center, 2014).

In the U.S., inadequate or non-existent health insurance prevents many from accessing timely or optimal care. The majority of those uninsured are African American and Latino, which accounts in part for the fact that ethnic minorities are more likely to be diagnosed at later stages of cancer, often requiring more costly treatment with less favorable outcomes (American Cancer Society, 2016). The financial impacts of cancer linger well into survivorship, long after cancer has been in remission (Stanton et al., 2015). As a result, women cancer survivors continue to worry about the financial impact of treatment on their families (Sherwood, Donovan, Rosenzweig, Hamilton, & Bender, 2008).

### **Quality of Life of Older Women Related to Cancer Treatment**

Evidence suggests that cancer impacts quality of life for older women. Research has shown that in older populations of breast cancer survivors, women reported lower psychosocial well-being, as compared to women of the same age without cancer (Robb et al., 2007). Older women experience the same hardships experienced by younger cancer patients, but often with age-related comorbidities leading a declining quality of life, such as decreased levels of mental, physical, and emotional functioning, cognitive impairment, depression, and loneliness (Kurtz & Dufour, 2002). In addition, older women's lives may entail complicating factors. For example, when compared to younger women, older women may have fewer social community networks and less family support, as they frequently live longer than males. Additionally, older women who experience impairment in mental health, physical functioning, and emotional/social support expressed lower scores on self-perceived health and psychosocial adjustment one year post breast cancer surgery, as compared to younger women (Kurtz & Dufour, 2002).

Conversely, research suggests that younger women can often experience more difficulty

coping with cancer when compared to older women. Older age can positively influence psychosocial stressors. For example, younger women may carry greater concerns about fertility, caring for children, and sexual functioning than their elderly counterparts (Ahmad, Fergus, & McCarthy, 2015).

Meeting the unique needs of older women with cancer calls for a holistic perspective that addresses such factors such as alleviating pain and emotional discomfort while preserving functional abilities (Alberg & Singh, 2001). Social support has been identified as especially important for older cancer survivors (Kurts & Dufour, 2002). Robb et al. (2007) indicated a need for more focused attention on enhancing functional and psychological quality of life among older cancer survivors. As cancer care evolves, we increasingly recognize that cancer impacts the whole person, including their family and community. Thus, in addition to treating the physical disease, those planning and administering cancer care need to consider and provide support for the psychosocial needs of both older and younger cancer survivors (Ahmad et al., 2015). The recent movement toward the integration of complementary and integrative practices in oncology reflect a growing awareness among the medical community of the need to support the whole person, in addition to addressing physical aspects of the disease throughout cancer care.

### **Complementary, Alternative, and Integrative Practices**

**Definitions and Examples.** Many definitions of “integrative health care” exist, all involving the integration of conventional and complementary approaches (NCCIH, 2012). The NCCIH (2012) distinguishes between complementary, alternative, and integrative healthcare approaches. Complementary practices are “non-mainstream” practices that are used along with conventional medical practices; alternative practices are “nonmainstream” practices used in place

of conventional medical practices; and integrative healthcare brings conventional and complementary approaches together in a coordinated way (NCCIH, 2012).

Complementary health care includes a broad range of practices. The National Center for Complementary and Integrative Health (NCCIH, 2012) categorizes two main subgroups of complementary health approaches as natural products and mind/body practices. The National Health Interview Survey (Clarke, Black, Stussman, Barnes, & Nahin, 2015) conducted between 2002 and 2012, asked U.S. adults about integrative and complementary health approaches they had used within the past 12 months. The following complementary approaches were specified by participants:

Acupuncture; Ayurveda; biofeedback; chelation therapy; chiropractic care; energy healing therapy; special diets (including vegetarian, vegan, macrobiotic, Atkins, Pritikin, and Ornish), folk medicine or traditional healers; guided imagery; homeopathic treatment; hypnosis; naturopathy; non-vitamin, non-mineral dietary supplements; massage; meditation; progressive relaxation; qigong; tai chi; or yoga, natural products, deep breathing, chiropractic or osteopathic manipulation, meditation, massage, homeopathy, progressive relaxation, and guided imagery. (Clarke et al., 2015, p. 2)

Most commonly used among adults as complementary health practices were non-mineral, non-vitamin dietary supplements; the second most common were deep breathing exercises. Yoga, tai chi, and qigong use increased between 2002 and 2012; similarly, between 2002 and 2012, the use of complementary health practices also increased among adults age 65 years and older. The National Health Survey indicated an upward trend in the use of complementary health practices among adults with limited socioeconomic resources. Evidence of racial variations suggested that Hispanic and non-Hispanic Blacks' use of complementary health



practices decreased between the years of 2002-2012, whereas use among non-Hispanic Whites increased in the same period (Clarke et al., 2015).

**Complementary and Integrative Practices and Cancer.** The term “integrative oncology” describes the incorporation of complementary therapies into a multidisciplinary approach in mainstream cancer care (Remen, 2008).

Remen (2008) has explained that,

Integrative oncology is not only about cancer. It is also about the people who have cancer and those that love them, and the transformative impact of this disease on their lives. Integrative oncology is a medicine of the whole person. It is about recognizing that personal wholeness and physical limitation often coexist and moving the focus of care beyond the cure of the body to the healing of the whole person. (p. 767)

Increasing numbers of cancer survivors are seeking complementary forms of medicine (Monti, Sufian, & Peterson, 2008; Sood, Prinsloo, & Cohen, 2014). This is particularly true among those with “psychosocial distress, poor quality of life, culturally based health beliefs, and those who experience health disparities in the mainstream healthcare system” (Monti et al., 2008, p. 2607). Frenkel, Sierpina, and Sapire (2015) indicated that

Even with successful treatment as well as good follow-up care, many patients continue to experience unmet physical, emotional, and spiritual needs as well as having an unsettling fear, fear of recurrence, a fear which most survivors share, even many years after their treatment ended. As a result, patients are continually looking for additional ways to address these needs and fears. Among the most popular approach is the use of complementary and integrative medicine. (p. 1)

These medicines include practices from a broad range of modalities often considered outside the dominant forms of healthcare (Monti et al., 2008).

**Benefits.** As the survival rates and diversity of people with cancer continue to rise, addressing cancers through complementary and integrative medicine, including mind-in-body therapies, has become increasingly important. Evidence-based complementary therapies in oncology treatment are techniques that can help heal the whole person, as opposed to focusing solely on curing the disease, to improve physical and emotional symptoms and quality of life (Remen, 2008). Such therapies tend to involve low levels of risk and cost (Frenkel, Sierpina, & Sapire, 2015), to be non-invasive (Chan, Lee, Suen, & Tam, 2010), and to help cancer survivors live more comfortably physically, mentally, and spiritually (Johnson, 2016).

**Who accesses complementary and alternative healthcare?** Oncologists incorporate complementary therapies less frequently than do other specialists (Diehl, 2009; Elkins, Fisher, & Johnson, 2010), yet cancer patients display a higher rate of use of complementary therapies as compared to the general population (Elkins et al., 2010; Fouladbakhsh & Stommel, 2008). Women seek out complementary and alternative approaches to healthcare more frequently than do men. In 2002, 1.2 million cancer survivors reported engaging in complementary and alternative practices, over 60% of them women (Fouladbakhsh & Stommel, 2008). White, well-educated women were more likely to engage in integrative complementary treatments, as compared to women with less education and women of color (Fouladbakhsh & Stommel, 2010). Research indicates that minority groups have less access to support groups and psychosocial intervention and thus, to improve survivorship, need to be included more frequently in cancer research (Guidry, Torrence, & Herbelin, 2005). Populations with lower socioeconomic resources were also less likely to engage in complementary and integrative practices. On the whole, individuals suffering depression, pain, and insomnia were more likely to engage in complementary and integrative practices (Fouladbakhsh & Stommel, 2010).

**Rationale for researching integrative oncology.** The use of integrative approaches is increasing across healthcare settings in the U.S. (NCCIH, 2016) and the number of people seeking complementary and alternative medicines is expected to rise (Tindle, Davis, Phillips, & Eisenberg, 2005). Oncology and other healthcare providers will likely encounter a growing percentage of patients who engage in complementary and integrative practices. A better understanding of complementary and integrative approaches in cancer survivorship would therefore promote quality of care and possibly increase positive health outcomes, which in turn may improve survivorship (Frenkel et al., 2015) and enhance quality of life in cancer survivors (Chaoul, Millbury, Sood, Prinsloo, & Cohen, 2014; Remen, 2008). Traditional Chinese Medicine, a complementary approach utilized in both Eastern and Western hemispheres of the world, offers various forms of integrative approaches to care, including Qigong.

### **Traditional Chinese Medicine**

In the U.S., Traditional Chinese Medicine (TCM) is used primarily as a complementary approach to healthcare (NCCIH, 2009). According to Master Shih (1994), TCM has the longest history of any medical tradition in the world, dating back 5,000 years. The Five Element Theory informs TCM, including metal, wood, water, fire, and earth, as well as the interaction of yin and yang, and the vital flow of qi in the body (Shih, 1994; NCCIH, 2009). The meridians in the body also play an important role in the movement of qi and blood flow to each area of the body (Shih, 1994). TCM includes Chinese herbal medicine, acupuncture, tai chi, (NCCIH, 2009) and qigong (Ling, 2013; Shih, 1994).

**TCM and Cancer Etiology and Diagnosis.** TCM understands cancer etiology and treatment differently than does conventional Western medicine. In TCM, the cause of cancer is thought to be tumor progression brought on by toxic environmental factors and internal factors such as emotional stress, poor nutrition, damaged organs, or excess waste (Walters, 1993). In

U.S. Western medicine, cancer is defined in terms of tumor size, location, and the type of cancerous cells. According to Ling (2013), TCM views tumors as both morphological and functional changes of tissues and organs:

The pathological changes of tumors are clinically presented as dampness, toxin, phlegm, stasis (obstruction), and deficiency. Therefore, from the perspective of TCM, the mechanism of tumor can be summarized as: stagnation of toxin and heat, obstruction of phlegm/dampness, Qi stagnation and blood stasis, and imbalanced yin and yang in viscera and bowels. Patients often have the dysfunction of viscera and bowels (e.g., deficiency in liver, spleen, and kidney) and deficiency of the original qi. In addition, pathological changes can also occur due to the emotional impairment. The imbalance between yin and yang in viscera and bowels can be particularly obvious in patients with advanced cancers. (p. 141)

According to Ling (2013), deficiencies in the spleen or kidneys can weaken healthy qi, which can hamper the defense qi from preventing the invasion of pathogens. Thus, when the healthy qi can no longer withstand a pathogen, illness can spread within the body. Treatment is focused on improved quality of life, prolonging survival, and relieving cancer symptoms (which are considered subjective discomforts felt by the patient), which can result from a lack of vital qi (Ling, 2013).

According to Walters (1993), qi is a form of life force energy that travels through 14 major meridians of the body every 24 hours. Imbalances such as excess, stagnation, or deficiency in vital qi or life force energy are thought to be the cause of illness. Cancer is a manifestation of qi imbalance, but the imbalance may be unique to each patient. Diagnosis occurs in the form of a physical observation of the tongue and pulse as well as by assessment of yin and yang, which is guided by the Eight Principles: yin and yang, cold and heat, deficiency

and excess, and interior and exterior. The tongue helps to determine the progression of the illness by revealing specific body imbalances. Similarly, the pulse along the wrist and radial artery helps reveal areas of disharmony in the internal organs. In Traditional Chinese Medicine, once the pattern of disharmony is identified, treatment is formulated as a pathway to restore harmony or balance of the body's qi (Walters, 1993).

**TCM and Cancer Treatment.** According to Walters (1993), in TCM cancer treatment, focus is on the qi imbalance rather than on a specific type of cancer, such as breast or ovarian. In the United States, people with cancer are rarely treated solely by means of TCM without the application of Western methods. More commonly, TCM is used in conjunction with Western methods. Cancer patients may turn to TCM as an adjunct to Western treatments such as radiation or chemotherapy, or they may choose TCM as an alternative to more toxic forms of treatment (Walters, 1993). In some cases of advanced cancer when surgery and radiation are no longer options, patients will turn to TCM as a primary form of cancer treatment (Ling, 2013).

**Herbal medicine and acupuncture.** Walters (1993) identified the primary modes of cancer treatment used in TCM as traditional Chinese herbal medicine and acupuncture. Fu Zhen is a form of herbal therapy often administered to patients undergoing radiation therapy. Fu Zhen therapy helps to enhance the immune system and has been effective in helping increase survival rates. Antitoxin herbal therapies have also been shown to inhibit the growth of tumors in the body.

Used to treat cancer are three broad categories of Chinese herbs: (1) Tonic herbs increase the growth and activity of immunological cells and proteins; (2) toxin clearing herbs work to clear the blood of tumor waste products; and (3) blood activating herbs help to reduce inflammation in relation to the body's immune response and to reduce coagulation (Walter, 1993). TCM herbal treatments focus primarily on prolonging survival, improving symptoms,

and increasing quality of life; they can also be used as palliative therapy (Ling, 2013).

Walters (1993) indicated that acupuncture, another form of TCM, has been used successfully in the treatment of cancer. Acupuncture works by addressing changes in the flow of qi along the meridian channels through the placement of fine needles in the skin at specific points along the meridian channels. Acupuncture treatment for cancer works to reduce pain, stress, and functional issues associated with cancer.

## **Qigong**

“Qigong is an ancient energy practice passed down by ancient masters who understood the interconnections inherent in the Universe and between man and nature. They understood how certain movements and postures could rebalance the body, mind and spirit by connecting universal energy” (Traditional Chinese Medicine World Foundation, 2017). Qigong is a vital component of Traditional Chinese Medicine and is considered a safe and low-risk practice in the United States (NCCIH, 2009) that dates back to ancient Chinese dynasties (Liu & Qiang, 2013). According to Master Shih (1994), the development of qigong began at least 5,000 years ago, while some documents suggest qigong practitioners existed as far back as 10,000 years.

Although qigong originated in China, the practice has become more common in the U.S. According to the National Health Interview Survey, in 2007, approximately 600,000 Americans practiced qigong. Qigong has been described in many different ways. Qigong is a form of “breath training” (Palmer, 2007) and “manipulation of vital energy” (Walters, 1993). *Qi* is also understood as energy that moves together throughout the body and the universe (Palmer, 2007). Master Shih (1994) defined qigong as a holistic therapy; qigong is “the art of exercising the jing (essence), qi (energy), and shen (spirit) and at it’s core is the yi (consciousness) and qi (vital energy)” (p. 3). The purpose of qigong is to balance the functions of the body “Qigong brings self-regulation and self-control to the vital organs” through the development of consciousness

and breath ultimately moving and strengthening the internal Qi (p. 3). An individual training in the practice of qigong must master practices to regulate the heart/mind, the body, and respiration (Shih, 1994). Qigong is further described as ‘energy work’ that “works directly with the body’s meridian system-your energy body- it stimulates and nourishes the internal organs, making energetic communications between them more efficient” (Traditional Chinese Medicine World Foundation, 2017). Master Mingtong Gu (2012) described qigong as,

“...gentle movement, meditation, and sound to perceive and direct this energy within.

Practiced in a state of awareness, Qigong uses the conscious mind to guide the body to relax while remaining alert. In this awake, yet completely relaxed state, one can amplify the energy to promote well-balanced functioning of the physical body.”

### **Medical Qigong**

Medical qigong, as a vital component of TCM, began as early as 2000 BC (Liu & Qiang, 2013). Medical qigong consists of a combination of movements, postures, and breathing (Shih, 1994) which focus upon the inner cultivation of qi to nourish health and prevent illness.

According to Master Shih (1994), qigong is mainly considered a self-practice; however, the qigong master can prescribe instruction as well as work with the patient’s energy in conjunction with his or her own energy to help create balance or to enhance or generate more energy for the patient (Johnson, 2005; Shih, 1994). In qigong, as part of TCM, “physical health is understood as being profoundly interdependent with emotional balance, harmonious life-circumstances, and spiritual well-being” (p. xi). While thousands of forms of qigong have existed throughout China, emerging from a variety of different schools and teachers (Jahnke, Larkey, Rogers, Etnier, & Lin, 2010), medical qigong has become the most common form of practice (Liu & Qiang, 2013).

**Medical Qigong traditions.** Many traditions of qigong exist in China, including Medical, Buddhist, Taoist, Confucian, and Martial Arts Qigong (Liu & Qiang, 2013; Shih,

1994). Buddhist qigong, according to Liu and Qiang (2013), combines the breath with the physical and mental, a greater emphasis being devoted to the mind throughout the practice. Confucian qigong focuses more on tranquility of mind and relationships; although this tradition is still practiced, its observance declined after the Song and Ming dynasties. Taoist qigong combines mind and spirit to develop an “internal elixir” of qi (Liu & Qiang, 2013, p. 34). The main focus of medical qigong practice is to develop the spirit through a more meditative (versus physical) practice (Shih, 1994).

**Medical Qigong and the breath.** Practicing medical qigong is a process of affecting qi, or “breath training” through body movement and concentration (Sagli, 2008). Both static (yin) and dynamic (yang) movements as well as breathing play a role. Breathing inward is associated with yang, while breathing outward is associated with yin. While health practices that utilize breath are fairly common, the involvement of yi, which includes a system of consciousness involving thoughts, emotions, intuition, and ideas, is singularly associated with the practice of qigong as a process of the mind (Micollier, 1999). Micollier (1999) explained, “The handling of the emotions by the various social actors present—the [qigong] master, the group, and the individual—is a treatment and care technique in the context of qigong practices” (p. 22). Qi is an element guided by thought, which also allows the emotions to surface (Micollier, 1999).

**Physical benefits of Medical Qigong.** Research has shown that practice of qigong can bring about a range of physical health benefits. In a randomized control trial involving 200 subjects, Chan et al. (2010) found qigong to be a safe, non-invasive and cost effective way to help increase cardiovascular health in patients with obstructive pulmonary disease. Additional studies have suggested that qigong practice can help to support pain management (Astin et al., 2003). In a randomized control trial, Lynch, Sawynok, Hiew, and Marcon (2012) randomly assigned 100 participants to different qigong practice groups compared with patients who were



on a waiting list for fibromyalgia treatment. The participants demonstrated improvement in several areas including physical and mental functioning as well as sleep. In a systemic review including five randomized control trials, all studies indicated pain reduction in the qigong groups compared to the control group (Lee, Pittler, & Ernst, 2007). Further research has indicated that in participants with type-2 diabetes, the practice of qigong resulted in weight and insulin reduction (Liu, Miller, Burton, Chang, & Brown, 2011) as well as exerting an ameliorative effect upon the risk factors associated with type-2 diabetes (Xin, Miller, & Brown, 2007), such as elevated glucose levels in the blood (Sun, 2009). Qigong has also been shown to improve physical balance and overall well-being in a small sample of participants diagnosed with multiple sclerosis (Mills, Allen, & Carey-Morgan, 2000). Given these findings, more rigorous clinical trials are called for to assess the efficacy of qigong in reducing chronic pain in adults (Bai et al., 2015).

**Medical Qigong and psychosocial stressors.** The practice of qigong has been recommended as an activity to promote psychological health (Johansson, Hassmén, & Jouper, 2008). Positive affect and subjective well-being have demonstrably increased through qigong practice (Johansson & Hassmén, 2013). Likewise, this practice has also been found to contribute toward mitigating stress levels and to amplify calm and relaxation (Posadzki, 2010). Evidence has shown that familiarity with the movements associated with qigong increased feelings of calm, peace, and connection to a growing inner energy among college students (Chrisman, Christopher, & Lichtenstein, 2009). Groups such as computer operators (Skoglund & Jansson, 2007) and hospital staff (Griffith et al., 2008) have been found to measurably reduce stress through engagement in qigong practice. Research also suggests that qigong can help to increase general psychosocial well-being, self-esteem, and positive mood, and has been used to complement psychopharmacological treatments (Abbott & Lavretsky, 2013).

**Medical Qigong and mood disorders.** Scholars have shown that the practice of qigong can also help to inhibit the onset of mental health disorders. The practice has been demonstrated to potentially improve depression, anxiety, and stress (Jahnke et al., 2010; Posadzki, Parekh, & Glass, 2010). A systemic review of randomized control trials indicated that qigong may be beneficial in the management of depressive symptoms (C.W. Wang et al., 2013). In a review of the neurobiological and psychological mechanisms underlying the anti-depressive effect of qigong exercise, researchers named the following three possible mechanisms occurring in the brain as a result of qigong practice: “increased brain serotonin synthesis, reduction of adrenal glucocorticoid, and promotion of neurogenesis in the hippocampus” (Tsang & Fung, 2008, p. 861). A meta-analysis including a total of 15 randomized control trials and quasi-experimental studies reviewed the effect of qigong on psychological well being. Results indicated positive effects; however, the studies had significant methodological limitations as several were pilot studies with small sample sizes (F. Wang et al., 2013).

**Medical Qigong and stress disorders.** Research has indicated that qigong practice proves beneficial as an adjunctive intervention for the treatment of mild traumatic brain injury in military service members with comorbid posttraumatic stress disorder (Yost & Taylor, 2013). It was also found a beneficial adjunctive intervention for survivors of torture and refugee trauma who suffered from PTSD (Grodin, Piwowarczyk, Fulker, Bazazi, & Saper, 2008).

**Medical Qigong and older populations.** For older adults with chronic physical illness, research indicates that qigong can offer a promising intervention to help improve biopsychosocial health (Tsang, Mok, Au Yeung, & Chan, 2003; Tsang, Cheung, & Lak, 2002). The practice of qigong is particularly useful to elderly populations in part because the movements are slow, controlled, and focused on the center of gravity (Bottomley, 2004; Kemp,

2004). Older populations have been shown to be successful in utilizing qigong to prevent the development of stress (Anna et al., 2012).

Qigong has likewise been found to help alleviate depression in older populations (Tsang, Fung, Chan, Lee, & Chan, 2006). As noted above, women age 65 and older who undergo treatment for cancer are more likely than younger women to suffer side effects, among which is impaired cognitive functioning (Alberg & Singh, 2001). Several quantitative studies have shown that qigong contributes to quality of life for cancer survivors, including women with breast cancer undergoing radiation therapy (Chan et al., 2012; Chen et al., 2013; Chen & Yeung, 2002; Oh et al., 2010; Oh, Buttow, Mullan, Hale, et al., 2012), and contributes to cancer survival rates (Oh, Butow, Mullan, Clarke, et al., 2012).

**Medical Qigong and Cancer Treatment.** Several quantitative studies have shown that qigong practices contribute to the quality of life for cancer survivors. A review of research on qigong therapy use in cancer patients in China was completed by Chen and Yeung (2002). The researchers noted that not many clinical studies had been completed in area of qigong and cancer treatment, their study included 19 clinical studies in Chinese. The researchers found that the groups practicing qigong experienced greater improvement and survival rates than the groups using conventional methods, however several limitations such as lack of control groups and “lack of sophisticated design” (p. 540) undermine the results (Chen & Yeung, 2002). A randomized control trial conducted in China by Chen et al. (2013) included 96 women between the ages of 25-64 with varying stages of breast cancer. Women in the control group attended qigong five times per week over 5 or 6 weeks while undergoing radiotherapy. Women in the qigong group reported fewer depressive symptoms, less fatigue, better quality of life. A systemic review by Chan et al. (2012) included twenty-three studies, 8 randomized control trials and 15 controlled clinical trials from various databases, many including studies from China. The

researchers discovered a pattern of biomedical outcomes suggesting that patients who practiced qigong together with receiving conventional forms of treatment for cancer had “significant improvement in immune function” (p. 1121) as compared to patients treated with conventional methods who did not practice qigong. Due to research bias and methodological problems in the majority of the included studies, the results were not conclusive and researchers called for more RCT’s with valid measures (Chan et al., 2012). Additionally, Oh et al. (2010) conducted a study including 162 cancer patients with various forms of cancer. Participants practiced qigong for 10 weeks while undergoing cancer treatment and were compared with a control group that did not practice qigong during treatment. Findings support the effectiveness of medical qigong in reducing cancer treatment side effects, improving mood, decreasing inflammation and enhancing quality of life (Oh et al., 2010). In a randomized control trial, the use of medical qigong for supportive care in 81 cancer patients concluded that qigong may have positive impacts on cognitive functioning as well as inflammation and advised further investigation in future research (Oh, Butow, Mullan, Hale, Lee, Guo, & Clarke, 2012). A systemic review and construct analysis by Klein, Schneider, and Rhoads (2016) assessed the evidence of qigong therapy in cancer care among 831 individuals across the United States, Australia, China, Hong Kong, and Malaysia. The study found that various qigong therapies had positive impacts on fatigue, immune function, cortisol levels, and quality of life related to cancer. The researchers discovered a global interest in therapeutic effects of qigong practices in cancer care. Furthermore, construct similarities existed across various types of qigong some of which were breath regulation, mindfulness, energy cultivation, and meditation (Klein et al., 2016).

### **Purpose**

A review of the literature shows that the experience of women cancer survivors who have engaged in qigong as an integral part of their healing process is under examined in the United

States. This study has sought to understand the experience of qigong for women who have lived with cancer in the United States. Research in the United States has yet to qualitatively address the experience of qigong practice among women cancer survivors; thus, it is hoped and intended that this exploration of the experience and meaning-making related to the use of qigong among women cancer survivors can facilitate new findings to help inform this gap within the existing literature, support the health, healing and quality of life of women cancer survivors, and inspire future research on the topic.

### **Methods and Research Design**

Interpretative Phenomenological Analysis (IPA) is well suited for research that focuses on the personal meaning-making of a small number of people who have a shared experience within a particular social, political, and historical context (Smith, Flowers, & Larkin, 2009). IPA has the ability to bring a closer understanding of the essence of a lived experience or phenomenon within a particular context and time frame through a process of narrative reflection and dialogue. IPA research focuses on personal meaning-making within a small number of people who have a shared experience within a particular political, social and historical context (Smith et al., 2009). The human body has historically been of particular interest as this methodology identifies the body as a critical player within human experience. Such an orientation is central to understanding the experience of those who practice qigong, since qigong is both a physical and mental practice.

This study uncovers the experience of qigong among women cancer survivors through the collection of interview data, followed by an in-depth analysis of the participants' experience. Embracing the complexity of lived experience in the context of cancer survivorship, IPA allowed the researcher to uncover the interconnected lived experiences pertaining to qigong among women cancer survivors over a period of time, excavating through dialogue and reflection the

meaning-making surrounding their practice.

### **Methods Rationale**

IPA is an integrative qualitative approach to research (Smith, 1996), which is facilitated by a co-construction of phenomenological data between the researcher and participants (Laverty, 2003). This framework regards the participant as the expert provider of knowledge of their experience within a collaborative arrangement with the researcher. IPA provides the tools to bring us closer to understanding the essence of a lived experience or phenomenon situated within a particular context and time frame, through a process of narrative reflection and dialogue (Smith et al., 2009). As it relates to narrative inquiry, IPA allows the researcher to focus upon how verbal narratives contribute to meaning-making by focusing on the content of verbal stories related to the development of a phenomenon. Narrative inquiry in IPA embraces verbal interviews and written texts in which meaning is uncovered in a shared process between the researcher and participant through dialogue about events.

### **An Overview of Interpretative Phenomenological Analysis (IPA)**

Interpretative phenomenological analysis came into being in the 1990s as a result of Smith's work (1996), which helped to establish IPA as a research method in the field of psychology. While this contemporary methodological approach is still considered emergent, its underpinnings are deeply rooted in historical philosophical and phenomenological concepts, ideas, and theory (Smith et al., 2009). IPA has most often been utilized in research related to health and clinical psychology (Brocki & Weardon, 2006). According to Smith et al. (2009), IPA is informed by three main areas of philosophy: phenomenology, hermeneutics, and idiography.

**Phenomenology.** Smith et al. (2009) indicated that phenomenology is a philosophical framework that examines of the essence of a given experience, various schools of which differ in

regard to specific methodological underpinnings. Hermeneutic philosopher Martin Heidegger (1962) informed IPA by situating the person within his or her context, suggesting that our being in the world is always in relation to something. People cannot be “meaningfully detached” (p.16) from the context of their world, as was suggested by the 20<sup>th</sup> century phenomenological philosopher Edmund Husserl’s stipulation that investigators may bracket personal values and perspectives as they explore phenomenological data or material. However, Husserl’s emphasis on reflection remains relevant to IPA as reflection is part of the narrative inquiry. The 20<sup>th</sup> century French philosopher Maurice Merleau-Ponty shared Heidegger’s contextual Interpretative ideas, and additionally viewed the body as playing a fundamentally important role in how we come to know and experience our world. As the body is central to understanding the experience of those who practice qigong, IPA’s parallel preoccupation with visceral experiences makes it ideally suited to the scope of this inquiry (Smith et al., 2009).

**Hermeneutics.** Hermeneutics, the second foundational theoretical precept of IPA, is a philosophy of interpretation. Hermeneutic methods were originally developed and utilized within theological contexts for the purpose of bible interpretation (Gadamer, 1976). Heidegger (1962) further developed the philosophy of hermeneutics by suggesting that language acts as the foundation for being. Heidegger’s student, Hans-Georg Gadamer (1976), suggested that within language one can discover the meaning of the world. He further stressed the importance of considering the influence of specific historical contexts in arriving at a given interpretation of meaning, uncovering what might otherwise be hidden in the human experience or relationships (Speigelberg, 1975). The goal of IPA is to reveal aspects of the human lived experience of which participants may be either consciously or not yet consciously aware. This process is suited to uncover meaning within the practice of qigong by facilitating consideration of both explicit and implicit experiences. That which may not be obvious has the opportunity to emerge

through reflective dialogue between past and present (Smith et al., 2009).

**Idiography.** According to Smith et al. (2009) idiography comprises the third philosophical framework within IPA. Idiography is committed to the particular, which emphasizes attention to detail. Thus, IPA is best suited for small groups of 3 to 6 participants to capture an in-depth and detailed analysis of an experiential phenomenon in a particular context. IPA does not extend generalizations from small samples to large populations, but rather “locates them in the particular” by developing a careful understanding of a person’s specific involvement in a phenomenon. This process is central to understanding a phenomenon such as the practice of qigong in the particular context of cancer survivorship (Smith et al., 2009).

IPA incorporates narrative inquiry, a process by which researchers can gather stories that detail lived experiences of individuals through verbal forms of retelling. The stories help to create and co-construct meaning between the researcher and participant in a collaborative process which situates the participant and researcher as co-researchers (Creswell, 2013). In IPA, the ways in which the researcher shares in the phenomenon are inter-subjectively woven into the research through the process of co-research and analysis. Thus, my own relationship to qigong practice and interest in the intersection of this practice with women cancer survivors is brought forth as well and expressed in the role of the researcher.

## **Data Collection**

**Participant Recruitment.** Since IPA does not intend to generalize findings to a wider population, but rather uncovers meaning of a specific phenomenon, the participant sample is typically purposeful and homogenous (Larkin & Thompson, 2012). Participants for this study were selected based on their ability to share insight into the meaning of the practice of qigong within the particular context of cancer survivorship. For the purposes of this study, cancer survivor is broadly defined as a woman who has been diagnosed with cancer at any time



throughout her life. A sample of 12 participants was included in this study. The number of individuals for this sample is somewhat larger than is typical for IPA research; however, the larger sample size helped to guarantee saturation of the data in order to capture the quality and detailed complexity of the phenomenon, a focus that is central to IPA.

Participants were recruited via fliers sent to qigong instructors in the U.S.. The flier included a description, purpose of the study, and participation criteria. Screening was completed to ensure that individuals met criteria for the study. Consent forms were provided, discussed, and signed prior to the interview process. Monetary compensation of \$25.00 was provided to participants who completed interviews with the researcher.

**Inclusion/Exclusion Criteria.** Participant inclusion in the current study was based on the following criteria: (1) The individual must identify as female and be 18 years or older at the time of the interview; (2) The individual must be maintaining a practice of qigong at the time of the interview; (3) The individual must have lived with cancer at some point in her life; and (4) The participants engaged in private interviews must be able to consent to participation and be willing and able to engage in the interview with the researcher. Consent was not required for the previously published interviews due to their established availability to the public.

No exclusions were placed on participation based on variations of cancer diagnosis, stages of cancer, or other forms of chronic or acute illness that may have been present in the lives of the participants. No exclusions were made based on race, ethnicity, socioeconomic status, sexual orientation, religion, or spiritual beliefs.

**Individual Interviews.** Various modes of collecting interview data included in-person interviews between the co-researcher and participant, email interviews between the co-researcher and participant, as well as accessing existing interviews published in the public domain. All interviews focused on women discussing their practice of qigong in the context of living with

cancer. Of the 12 interviews, five were collected via in-person or email interviews and seven were collected via published interviews. One participant dropped out of the in-person interview process; therefore, the total in-person interviews included five instead of six participants. The information selected from published interviews was relevant to the experiences of women who have lived with cancer and engaged in qigong practice. The researcher chose to incorporate published interviews because the content coalesced well with the collected interview data. The published interviews also provided a means to achieving saturation for the research question.

Private semi-structured interviews were individually coordinated between the researcher and participant in a location preferred by the participant. Semi-structured interviews included initial rapport building, addressing the main research question, and inviting the participant to engage in the interview. According to Smith et al. (2009), a semi-structured interview consists of open-ended questions that allow the co-researcher to enter into the life world of the participant. As mentioned, IPA regards the participant as the “experiential expert” (p. 58); therefore, the co-researcher remains flexible and open in the interview to the experience and themes relevant to the participant. In semi-structured interviews, the co-researcher generally provides minimal self-disclosure unless warranted to establish rapport. Semi-structured interview questions are open-ended rather than closed, which allows the lived experience to emerge, and yet the primary questions must be specific enough to address the research question. Thus, the primary interview questions were carefully formed to provide an open invitation for each participant to elaborate on their life experiences, and also to inform the research question (Smith et al., 2009).

The semi-structured questions included “Tell me about your cancer diagnosis – what was that like?” and “ Tell me about your qigong practice now, as opposed to when you started.” Prompts such as “Tell me a bit more about that” and “What do you mean by \_\_\_\_\_?” were

asked to help elicit a depth of understanding and increase clarity. The interview questions were utilized for email interviews and the in-person interviews. Of the five interviews completed with the researcher, one was completed via email at the request of the participant.

**Published interviews.** Seven published interviews were included in the data collection along with the five in-person interviews. The published interviews were deemed appropriate and useful to the data collection for several reasons. Specific published interviews were chosen on the basis of how well they fit with the research question and matched the inclusion criteria of the participant sample. The published interviews chosen included adult women who had lived with cancer and engaged in qigong practices relating directly to this experience. The published interviews contributed meaningful insight while helping the data collection reach saturation for the research question. Furthermore, the inclusion of published interviews may help to protect anonymity of participants by providing additional voices and experiences across various qigong communities within the research.

**Participant Demographics.** The participants were adult women who had lived with cancer and engaged in qigong practices. Participants who engaged in interviews with the researcher completed a demographic questionnaire consisting of questions related to race, ethnicity, age, level of income, years of education, duration of qigong practice, and medical information. Participants were encouraged to share within their comfort level. It was not possible to request demographic details directly from participants in the published interviews, where the degree to which participants chose to disclose demographic information varied.

**Individual interviews.** Five of the 12 women completed in-person interviews and shared varying degrees of demographic information, all 5 participants being between 55 and 72 years of age and all but one of them retired. Four had completed treatment for cancer and reported that cancer was in remission, or undetectable, at the time of the interview; one was currently

undergoing cancer treatment. Four out of five participants reported having earned a bachelor's degree or higher, while one chose not to disclose her level of education. Four out five participants reported income as predominately middle class to upper-middle class and identified as Euro-American. Participant interviews were collected from various states in the United States including Washington, Oregon, and Montana.

Among these five in-person interview participants, the types of cancer diagnosis reported included colon cancer, breast cancer, and lung cancer. One participant did not specify her original diagnosis, but instead explained that cancer had metastasized to various areas of her body. All five participants practiced qigong, the length of time ranging from 3 months to as long as 15 years.

***Published interviews.*** While the researcher was not able to interview these participants directly, published information made evident that they were adult women, residing in the United States, living with cancer who were engaged in the practice of qigong. The age, ethnicity, and socioeconomic status of the participants were not specified. Without the means to directly inquire, the researcher found demographic information such as age, race, ethnicity, religion, income and sexuality inaccessible. At least three of the seven participants were in the work force rather than retired; three were undergoing cancer treatment at the time of the interview. Three participants indicated that the cancer cells were no longer detectable, or that the cancer was in remission. Although the length of time for cancer remission varied, specific details were not available. One participant stated that 17 years had elapsed since she had been diagnosed with breast cancer but did not indicate directly whether the cancer was in remission. The types of cancer diagnosis reported varied among the participants. Those identifying a specific cancer diagnosis referenced breast cancer, lung cancer, lymphoma, and anal cancer at various stages. Two of the participants disclosed that they were experiencing a recurrence of cancer. The

geographic locations and socioeconomic statuses of the participants was unknown, as was the length of time that the participants engaged in qigong practices.

**Ethical Considerations.** Psychological and physical well being of all participants remained a critical point of focus throughout the research process. Describing sensitive life experiences related to living with cancer has the potential to cause psychological distress. Referrals for mental health services and/or crisis lines were made available to participants that took part in the interviews with the researcher. Each participant retained the right to withdraw from the research at any time prior to publication without penalty.

To preserve confidentiality throughout the research process, the following measures were taken: A) All private interview data was collected carefully to protect participants' anonymity and all interview records were stored in a protected location. B) Identifying information was removed or changed in individual transcriptions and results of analysis for all of the various types of interviews. C) Participants who had completed interviews with the researcher were provided an opportunity to review the interview transcript for accuracy and to withdraw any information or comments at will. D) Identifying information was altered to protect identities of participant interviews that were included from the public domain.

### **Data Analysis**

In gathering data for Integrative Phenomenological Analysis, the researcher engages in an iterative process of moving from the particular to the whole and back to the particular (Smith et al., 2009). The iterative process also calls for "psychological focus on personal meaning making in particular contexts" (Smith et al., 2009, p. 80). IPA involves a dialogue between co-researcher and participants such that the co-researcher is repeatedly and actively engaged with the experiential narrative material. This study's co-researcher engaged in a non-linear process of reflection which accounted for her own subjective analysis of the narrative transcripts, a

hermeneutic process of moving between the part and the whole and vice versa. By engaging in this hermeneutic circle, the co-researcher repeatedly interacted with the narrative material while developing “exploratory commentary” (Smith et al., 2009, p. 84) focusing on specific language and the context in which language was presented. Exploratory commentary occurs in three stages: (1) The initial stage, which focuses on describing the content; (2) Linguistic commentary, which helps to explore specific uses of language; and (3) Conceptual commentary, which focuses on integrating the narrative material. The exploratory commentary helps to provide a framework for developing emergent themes and patterns across the data (Smith et al., 2009).

To organize and document the thematic map of the data, the co-researcher employed a qualitative software program, Dedoose, along with hand written notes on the transcripts. While programs such as Dedoose are becoming more common, use of technological methods in thematic analysis remains a controversial area in qualitative research. For this reason, the co-researcher began analysis by reading through the paper transcripts several times and generating several rounds of hand written coding, which was later transferred to Dedoose to be re-examined and organized into a visual representation of the data. Domains and themes were developed via thematic coding using both the written notes and Dedoose, the latter was also used to produce the tables and graphs of the analysis provided in the appendices.

**Thematic Analysis.** Thematic analysis is a method for “identifying, analyzing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79). This cultivates a rich and detailed account of the data, providing insights into the data’s complexities (Braun & Clarke, 2006). Thematic analysis is best suited for this form of phenomenological research because the research aims to further understand the phenomenon in question – in this case, the practice of qigong among female cancer survivors. According to Braun and Clarke (2006, p. 87), thematic analysis consists of six steps, a process by which the researcher moves in and out of the data in a

non-linear fashion:

Table 1

*Phases of Thematic Analysis*

Description of Thematic Analysis	Description of the Process
1. Familiarizing yourself with the data:	Transcribing data (if necessary), reading and re-reading the data, noting initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking whether the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

The audio recordings for both in-person and published interviews were initially transcribed via NoNotes. While editing the transcripts, the researcher listened to each audio recording multiple times to ensure accuracy and become more familiar with each particular interview and the data as a whole. Written exploratory commentary was captured by the researcher on paper while reading through each transcript. The researcher engaged in a non-linear process of moving between the individual meaning within the texts and the whole of the texts to examine language

and concepts as well as to reflect on the process. The researcher reserved considerable time for reflection in order to question and understand implications of her own perspective as co-researcher and to determine and understand thematic patterns in the data.

An inductive process was used to arrive at themes, which allowed the research question and experience of participants to evolve throughout the process of analysis. The process was “data driven,” meaning the researcher did not try to fit the data into “pre-existing analytic preconceptions” (Braun & Clarke, 2006, p. 12). Patterns were established within each individual transcript, then across the data, and finally developed into a thematic map that was organized first on paper and then in Dedoose. Thematic analysis also included looking at semantic or surface level meaning in the data as well as considering latent or underlying assumptions or ideals within the data (Braun & Clarke, 2006). Latent meaning was examined by looking at what was included in the text and what was not included as well as considering the language, concepts, and possible assumptions based on what was known about the context of the participant’s experience. It is important to note that the researcher did not approach the data with an established, theorized underpinning for what was articulated in the data, but rather, within the context of the participants, looked for meaning beyond the surface of what was articulated to also consider what was not.

Themes were defined and refined from a larger map of patterns into domains, with subthemes based on the goodness of fit and whether the theme accurately reflected the data as a whole. This process included examining thematic relevance and coherence within the story of the data. A theme that was deemed integral to the story of the data and offered significant meaning may have been chosen even though that theme may not have occurred with most prevalence in the data set. Prevalence was also considered and was determined by how often a theme was



present throughout the data. Themes were analyzed to determine which parts of the data they captured as well as whether they captured the essence of the overall experience.

Throughout the process of analysis, the researcher also engaged in a reflective process, as is detailed in the section devoted to the role of the researcher. In addition, the themes informed and helped to guide the literature review. The analysis influenced the literature review, which evolved throughout the process. The literature review was revised several times after themes were established in order to accurately reflect relevant aspects of the participant experience and to further inform the research.

### **Member Checking**

Member checking is a process of sending information back to the participants to obtain respondent validation (Denzin & Lincoln, 2005), to accurately record experience, connect and collaborate with research participants in revising or commenting on findings, and give voice to empower participants (Thomas, 2017). Used prior to as well as after thematic analysis, member checking in qualitative research can help to strengthen credibility, often described in qualitative research as trustworthiness (Thomas, 2017.)

As part of consent, participants that took part in the in-person interviews with the researcher agreed to be contacted by the researcher at a later date regarding the research data. Participants were contacted via the email address they provided the researcher for future contact. The researcher chose to engage in member checking as part of planned co-research collaboration, and also to provide an opportunity to empower and give voice to participants. Participants who had completed in-person interviews were contacted and offered an opportunity to review and make changes to their transcripts. Two out of the five participants responded and requested changes to further protect anonymity. One participant made additional corrections to clarify her meaning.

The second member check took place to share narrative themes derived from the analysis and to ask participants if the themes resonated with their experience. Due to the lengthy data collection process, a considerable length of time passed between the first and second member checks. Two out five participants responded to the second member check regarding the themes, which are further discussed in the results section.

### **Role of the Researcher**

The role of the researcher constitutes an important aspect in IPA and therefore is worth discussing to further understand the context of the research interest and analysis. My perspective as a researcher is undoubtedly shaped by my own relationship to both qigong and women with cancer.

During my graduate studies, I was introduced to and began practicing qigong through my acupuncturist. I then found a wonderful private qigong instructor, who was also a cancer survivor, and began practicing qigong regularly. I found qigong very calming and effective for maintaining an overall feeling of wellness. In addition, my familial context includes a history of women living with cancer. Together, these experiences shaped and inspired my interest in this research and interest towards the understanding of how women experience integrative health approaches, such as qigong, in the context of cancer survivorship.

It is also important to acknowledge that I work as an art therapist; therefore, in addition to written notes, I used art along with commentary as a means to engage in the iterative process of moving between the part and the whole. Art and written commentary was also part of my process of reflexivity, through which I became more aware of my own context as co-researcher and the potential to influence the analysis and research as a whole.

As a co-researcher, I found that making art furnished a useful addition to written commentary. Art has a unique ability to assist with processing an idea or question beyond verbal

territory, and can guide one in finding words and understanding meaning in an experience.

Making art was a non-linear process that helped me be mindful of how my own context shaped the process of seeing the data. For example, after or during a session of reading texts or coding for themes, I engaged in art making and/or looking at the art as a visual representation of the data, and reflected on what I had noticed. This practice helped to situate the process of noticing within my context as co-researcher.

The themes that emerged in my own process involved looking at my role as researcher and relationship to qigong, cancer, privilege and relationship to research as a whole. In the role of co-researcher, I experienced the state of knowing what it means to practice qigong without having experienced living with cancer. My experience of qigong practice has been very positive; therefore, I remained open to the various truths that might emerge from the data, including the possibility that themes could reflect experiences differing from my own. Another path I explored through art was my indirect relationship to cancer survivorship, to which I've been connected in my familial relationships and also as a therapist through my clients.

While exploring the data, I noticed myself feeling surprised by the evidence of how emotion emerged in the analysis. I noticed that I went through the texts to see if I had missed ways in which emotions may have been present. I asked myself why I was drawn to this. I explored and reflected on this phenomenon and realized that my connection was based on expectations I formed in my experience of being a family relation of women who have lived with cancer. Through reflection, I was able to create more awareness around my position. Even when we are very close to someone living with cancer, we cannot assume we understand her experience.

Another theme emerging in my reflection process was that, as a researcher, I identified a feeling of *needing to know*. Part of the reflection process involved identifying that feeling and

letting go of it; that is, I strive to stay engaged in the co-researcher role of being curious and learning from the data as opposed to knowing. Being mindful of my curiosity allowed for a more informed position as a co-researcher, acknowledging and reflecting on my own experiences along with those of the participants. This process allowed me, as co-researcher, to let the data tell the story and continue to be present to ways my own experience was situated in the process of analyzing the data.

Along with the perspectives mentioned above, I also reflected on my demographic background, which is consistent with the literature review findings that indicate mainly Euro-American, educated, middle class women gravitate towards integrative health practices such as qigong. In this regard, it would have been useful to know more about the demographics of all of the participants to be able to further examine class, gender, culture, religion, and race as they relate to access to privilege. My own privilege impacts my view of what it means to live with cancer and engage in qigong practices and in many ways appears to align with the population of women who tend to practice qigong in the United States. As a co-researcher, I enjoyed a position of privilege inherent in initiating the research and holding the important stories and experiences of the participants.

## **Results**

The purpose of the research was to further understand the experience of qigong among women who have lived with cancer through the collection and analysis of in-depth qualitative narratives. The twelve women who participated in the study represented individual, diverse experiences in regard to living with cancer. Each participant has a unique relationship to the experience of qigong in the context of cancer survivorship, and yet striking similarities allow for deeper insight into the shared experience of this phenomenon.

Table 2 demonstrates the five final themes and two sub-themes that emerged, categorized into three distinct domains. Themes can also be viewed in the code cloud (see Appendix A).

Table 2

*Domains and Themes*

Domains	Themes and Sub-Themes
A. The Initial Impacts of Cancer Diagnosis	Theme 1: The Emotional Impacts of Cancer Diagnosis. Theme 2: Towards the Engagement of Mind-in-Body Practices.
B. Experiences of Cancer Treatment	Theme 3: Engaging in Healing Practices during Cancer Treatment. Sub-Theme A: Experiences of Mind-in-Body qigong practices. Sub-Theme B: Pain and Suffering in the Process of Treatment for Cancer.
C. Post Treatment and “Getting Back to the New Normal”	Theme 4: Embracing Life After Cancer Treatment. Sub-Theme A: Mind-in-Body Qigong As A Way of Maintaining Health and Well Being. Theme 5: Finding Gratitude in the Experience of Healing and Living with Cancer.

**Domain A: The Initial Impacts of Cancer Diagnosis**

The first domain consists of two themes: Emotional Impacts and Mind-in-Body Experiences. Eleven of the twelve participants included their initial diagnosis as a part of their shared experience. This domain contains the least amount of narrative excerpts when compared to the other domains, yet most explicitly captures the shared experience of receiving a diagnosis of cancer.

**The Emotional Impacts of Cancer Diagnosis.** Narratives showed that during the process of diagnosis, participants deeply felt emotional impacts. Participants openly discussed

emotional reactions to receiving a cancer diagnosis. One participant shared her experience of being overwhelmed shortly after receiving a cancer diagnosis: “What I remember is the visit to the surgeon to discuss when the surgery was. She handed me a stack of brochures and said, read these and tell me what you want to do!” Participants expressed feelings of fear and shock: “It feels like a box of rocks, and it was so shocking finding my first lump, and things turned out so badly.... I was just shocked.” Other examples of this type of participant response included, “I was diagnosed with Breast Cancer in 2001. I was shocked and [had] feelings of disbelief and what do I do now?” and “I’ve just had a biopsy for testing for lung cancer and it’s the dark of the night and I’m terrified and I cannot go to sleep.” Another participant expressed her fear in the context of her diagnosis, but also mentioned that this experience of fear has returned throughout her experience of living with cancer. “There’s a lot of fear with these big diseases that comes and goes.”

Sadness and feelings of depression were among the emotional reactions. A participant reflected that when she was first diagnosed, “I was in a pretty sad state.” Another participant commented upon her emotional experience of anger with her physician for not acting sooner after she started experiencing symptoms of colon cancer: “I’m thinking, that’s not a good doctor!” One participant mentioned that she felt “severely depressed and it was eventually realized that I had lung cancer and so, I wasn’t in very good shape. I was very sick.”

**Towards the Engagement of Mind-in-Body Practices.** The interviews demonstrate that it was only after being diagnosed with cancer that all twelve participants engaged in mind-in-body experiences involving qigong. The decision to engage in qigong came usually in response to a recommendation by a healthcare provider or friend. Only one participant reported engaging in mind-in-body experiences at the time of her initial diagnosis and prior to treatment. She decided to try meditation. “I needed to get a hold of my mind and focus it on myself, on my

body.” She later expanded her practice to include qigong; however, none of the participants were involved in qigong at the time of diagnosis. As demonstrated in Table 2, the theme mind-in-body experiences is embedded within all three of the domains, showing that for each of the twelve women who participated in the study, the experience of qigong began and developed within the context of living with cancer.

### **Domain B: Experiences of Cancer Treatment**

This domain consists of one main theme: Engaging in Healing Practices. Within the main theme are two sub-themes, mind-in-body experiences and pain and suffering, because of the participants’ shared experiences of living through cancer treatment as an integrative process of healing and of pain and suffering.

#### **Engaging in Healing Practices during Cancer Treatment.**

*Experiences of Mind-in-Body qigong practices.* Participants expressed a variety of mind-in-body experiences related to qigong that co-occurred as part of engaging in healing as well as pain and suffering. The shared meaning among the participants included balancing pain and suffering through mind-in-body experiences as part of the healing process.

One participant expressed that breathing as part of her qigong practice helped her to balance the suffering experienced during cancer treatment.

What I really get out of it is that, also like yoga, that you do these different exercises and the point is to get your mind so you don’t have what my teacher called “monkey mind.” So that your mind is calm. And being able to transform yourself if you’re feeling nervous or agitated about something, to... just feeling like hot honey going to the floor, or concentrating on your breathing, or doing that four corners breathing where you’re going in, holding it... going out, then not breathing... then going in, holding it—that is extremely, extremely calming.

Participants noticed that mind-in-body practices helped them to develop a more in depth relationship with their bodies and feel more connected in their bodies during the pain and suffering experienced during cancer treatment. One participant acknowledged qigong as a powerful “tool” by means of which to access places in her body that she had begun to avoid during cancer treatment.

The other thing—and this is probably the one area that I haven’t really dealt with yet, and I find that qigong relates to this as well. So, after you have your surgery, and then they blast you with radiation, then you have like burns and scarring and part of my breast is sunken in and then it’s numb and creepy when you touch it. And so my initial reaction after all of that... was, I don’t want to, I planned to like never get myself another self-breast exam, because I just find it creepy touching it...

So doing qigong enables me. It’s not looking in the mirror, but it enables me to concentrate on the movement, and so I am having to recognize that part of my body that I prefer not to think about.

Another participant expressed that, “Well, yeah, stage IV lung cancer is pretty much the definition of someone who does not listen to herself.” Recalling a time of healing during her cancer treatment she stated,

I have my second life lesson, which is there are more ways of knowing than we think. Now, I had a very particular aim. My aim was to try to do this mind-body thing. Now, then, I would like you to know that I was a very unlikely candidate. But I thought, let’s see, what is it? Maybe it’s a place. Maybe it’s a place. So I worked hard to still this left brain that I worked so damn hard to build up so I could go exploring on my right. Maybe it’s a quality of mind, maybe it’s a receptivity or an openness to all that life brings. So I said, I’ve got to embrace the unknown. Maybe the body has its own radiofrequency.



Maybe it's a radio station and all I've got to do is to learn to find the right dial. So I worked on how to think of different frequencies, from very focused to very dream-like. In the end, I was able to hold a conversation with my body and actually listen to my cells... I started to learn a new language, a new way of interacting with my body called qigong. This, instead of the imagery in music, allowed me to feel the sensation—I kid you not—of my organs. And so my body started to talk to me directly.

A participant discussed being more connected in her body improving her healing process. She recalled releasing her cancer cells with butterflies,

And I've had tons of energy. I even did a fast today and I feel energetic; I don't feel tired.... His [qigong master] imagery of the butterflies was the first time I could hear that and actually see my cancer cells leave my body.

The co-occurrence of mind-in-body experiences and engaging in healing themes was also reported in the narratives as improving the healing process. A participant referred to a conversation with her oncologist,

She's you know, she has been hoping I'd improve for the last six months and I just kept getting, you know, up and down, up and down. And now she, you know, "They're finally working!" she's saying.... but I know it's the qigong that's helping me, that's made the difference. It's the only different thing that I have done in the last six weeks.

The participant attributes the mind-in-body connection cultivated through qigong as having had a powerful impact on her ability to heal: "I let go of my cancer cells, so much to the point that I had a PET scan a week ago and all the cancer does not show."

***Pain and Suffering in the Process of Treatment for Cancer.*** The consistent presence of pain and suffering as part of engaging in healing is present throughout this domain; various forms of pain and suffering were shared among the experiences of participants during cancer

treatment. Much of the discourse participants shared was rooted in the physical impacts that their bodies underwent in the process of cancer treatment. One participant described physical pain during cancer treatment: “I had chronic pain and inflammation all over my body... I was very sick.” Another participant expressed her frustration with how chemotherapy resulted in difficulty with concentration: “You can’t focus and concentrate very well. Your brain doesn’t work the same with all the chemo drugs.” Maintaining or preserving mobility during cancer treatment was part of engaging in healing, as well as pain and suffering. One participant reflected,

I don’t have full range of motion because of all the scarring and stuff. The shoulder is so complicated that when the front part is tight, like from your breast to your armpit, then that affects what’s going on with your muscles in the back.... I had my surgery done and at that point, I calmed down enough that I decided to have a large lumpectomy, where they basically took out a quarter of my breast.

Pain and suffering also pertained to cancer treatment and healing in the form of fatigue. One participant explained that she had to continue “for five days per week with a supplemental pill. That was a rough five weeks. They told me it would be. That was rough; I hardly got out of my chair. It was terrible.” Another explained, “So I did a plus C for the first three months, which is Adriamycin and Cytotoxin? Mustard gas and red death. And so that’s when I was fatigued... increasingly.” The narrative interviews depicted the process of healing as comingled with a process of pain and suffering that involved engagement with mortality. “I mean, I’m not dying, I’m just in limbo with it...” Another participant recalled being so ill that she questioned whether she would live:

I was very ill, the last two hospitalizations; I didn’t think I was going to live. I really felt like I was going to leave this body and move on, so I was just preparing myself for it.

But you know, my lungs filled up with fluid, my left lung collapsed, they had to put a chest tube for three days to pump off the liquid out.

One participant seemed to feel she had no choice but to be strong. She stated, “And I better cope with it. Because what’s the plan B? Are you really going to cope with it or what? So you have to, because there really is no plan B.” Another participant shared that she found strength through loved ones and also through mind-in-body experiences

### **Domain C: Post Treatment and “Getting Back to the New Normal”**

This domain consists of two main themes and one subtheme. The two main themes are Embracing Living and Gratitude. Mind-in-Body Experiences are expressed as a subtheme of Embracing Living. Two participants indicated that they were introduced to practicing qigong following treatment for cancer.

#### **Embracing Life After Cancer Treatment.**

*Mind-in-Body Qigong As A Way of Maintaining Health and Well Being.* The participants identified with the theme of embracing life and continuing to focus on mind-in-body practices as an integrative part of living and maintaining health. Participants described integrating mind-in-body practices, including qigong, in various ways such as relaxing and self-care. One participant indicated that the breathing in her qigong practice helped her to nourish her immune system after cancer treatment.

I think what matters is that you’re calm, you’re doing belly breaths: Like, the belly breaths is huge on the lymph system because basically, your job as a survivor, as somebody that has finished active treatment, is to give your immune system a happy place to be. Because you want that immune system to be, like, fighting off any bad guys that come by. And I also think that the whole relaxation and breathing aspects are

consistent with not, like, putting a lot of cortisol and all your stress hormones in your body.

One participant stated, “That’s what qigong does, more than meditation for me, more than yoga, more than just laughter and reading about things, more than just a mindfulness practice.” She went on to say,

Putting all those things together—qigong has all of that. It’s a moving meditation. It can be static; it can be dynamic. But it’s my practice, it’s my life, it’s my responsibility, and I feel that it’s my good karma that I learned all of these practices.

Another participant realized, “we are capable of more than we think.” Part of embracing life was to engage with her cells in a new way:

I love my cells in terms that I’m responsible for a hundred trillion of them. So I give them what they need. The water, the energy, the food, the nutrients and the love. I live in awe. I crack up and I cry when I need to. I adore. I cherish the time we’ve had together.

***Finding Gratitude in the Experience of Healing and Living with Cancer.*** Participants expressed gratitude for qigong and for the healing process, including the importance of their relationship and motivation for living a healthy life. Gratitude co-occurred prominently with mind-in-body experiences, as it did with post treatment, and comprised a shared reaction to having lived with cancer and as part of the post treatment experience.

One participant expressed gratitude for the healing that was sent from the qigong master she was working with:

I know he sent to me the last of healing energy, [for] which I am grateful, very grateful. But you know, I can only tell anybody that they should do qigong, even if they are healthy, because it’s just going to make them better. Because if somebody as sick as I

was has come back to life like this, imagine what it can do to somebody who has minor things or is well off.

Another participant discussed the “sweet” nature of her qigong master and expressed that, “... between the qigong exercises and the teleconference calls, that saved my life. I’m really grateful.”

Gratitude was also expressed in the form of getting back to life:

So now I feel like this year is like the year of sort of getting back, getting back to ‘the new normal’ I’ll call it. I don’t have these regular things that I do, like I haven’t been doing, like, for a year now. And being happy for things that are coming back, like walking, that’s thrilling.

One participant reported,

I’m experiencing perfect health—no more cancer, no more pain, no more depression—by integrating western medicine and qigong... So I’m living in a much happier, healthier, balanced life, feeling really connected and empowered to fulfill my purpose in life.

Looking back on the “opportunity [to] meet my qigong master,” one participant stated, “I have to attribute healing to many things. It caused me to change my life, my thinking, my actions, my attitudes; and the reward was, it worked. It’s very simple and it’s a beautiful practice.”

Gratitude for those who contributed to the healing process was also evident in the narratives:

You, my friends, have cried for me and hugged me and worn bracelets for me and given me massages and shared my journey and I can never be grateful enough. This isn’t about me. This is about you and the tremendous generosity of spirit that you have. And I in turn carry each of you really deep in my heart.

## **Member Checking Results**

Participants who completed individual interviews with the co-researcher were provided with information regarding the narrative themes and asked if the themes and subthemes resonated with their experience. Two out of the five participants responded. One participant felt that “the themes in each category are right on with my journey,” while another participant had mixed responses. In particular, one participant commented that the term “mind-in-body” was confusing and “doesn’t resonate with me.” She explained that “movement” or “exercise” resonated more with how she thought about the practice of qigong in relation to living with cancer.

## **Discussion**

The study produced noteworthy findings regarding women’s experiences in their engagement with qigong in the context of cancer survivorship. This discussion focuses on the themes and subthemes categorized in the three distinct domains: (1) Cancer Diagnosis and The Initial Impacts of Cancer Diagnosis; (2) Experiences of Cancer Treatment; and (3) Post Treatment and “Getting Back to the New Normal.” The interwoven shared meanings among the domains and themes are discussed in detail and situated within existing literature.

### **Domain A: Cancer Diagnosis and The Initial Impacts of Cancer Diagnosis**

The shared experience of emotional distress was the most prominent finding in the diagnosis phase of living with cancer. Participants expressed various emotional responses including fear, anxiety, anger, depression and grief. Discourse related to emotional distress was predominantly expressed during the phase of diagnosis, as compared to cancer treatment and the post-treatment phase. This finding is consistent with existing literature, which indicates cancer survivors experience elevated distress while undergoing diagnosis (Andreu et al., 2012; Hulett et al., 2015; Moseholm et al., 2016). Cancer survivors are at a greater risk of experiencing

psychological distress and psychiatric disorders including anxiety, depression, and posttraumatic stress (Jacobsen & Andrykowski, 2015; Mehnert & Koch, 2008; Miller & Massie, 2006).

Research has also shown that during diagnosis, as well as during treatment for cancer, psychosocial factors were more likely than medical factors to contribute to distress (Andreu et al., 2012). In a quantitative study, researchers found that depression was a strong predictor of fatigue as compared to cancer treatment in breast cancer survivors (Bower et al., 2000).

Research suggests that over half of cancer survivors experience depression, although it can be difficult to distinguish between side effects of treatment and depression (MD Anderson Center, 2014). Coping through the expression of emotion can lead to greater quality of life, decrease in distress levels, and better physical health in breast cancer survivors (Stanton et al., 2000).

The current findings support previous research, which suggests qigong can have beneficial impacts on the management of depression (Jahnke et al., 2010; Posadzki, Parekh, & Glass, 2010; Tsang et al., 2006; C.W. Wang et al., 2013) and can benefit psychological health (Johansson, Hassmén & Jouper, 2008), as well as improve cancer related quality of life (Chen et al., 2013; Chan et al., 2012; Chen & Yeung, 2002; Klein et al., 2016; Oh et al., 2010; Oh, Butow, Mullan, Clarke, et al., 2012).

### **Domain B: Experiences of Cancer Treatment**

Engaging in healing was the most prominent shared experience throughout cancer treatment. Discourse pertaining to emotional experiences was not directly acknowledged by participants during cancer treatment and emotional distress featured far less prominently in the narrative interviews during discussion of cancer treatment as compared to diagnosis. This domain captured the intense pain and suffering experienced by participants in their process of healing. Participants commonly reported fatigue as part of the experience of cancer and the healing process. Research has shown fatigue to be a common form of suffering among cancer

survivors (Bower, 2014; Hofman et al., 2007). Previous research suggests that cancer-related fatigue is prevalent across variety of cancer diagnoses and can profoundly impact quality of life (Hofman et al., 2007).

Participants shared various forms of physical suffering, including problems with range of motion in their limbs, pain throughout their bodies, cognitive impairments, and various levels of disfigurement. Research indicates that pain is one of the most commonly experienced impacts of cancer (Jacobsen & Andrykowski, 2015) and can have negative impacts on quality of life (Green et al., 2011). Pain and suffering appeared to be positively impacted by qigong. Previous studies have suggested that practicing qigong can help to support pain management (Astin et al., 2003; Lee, Pittler, et al., 2007). Participants shared the experience of feeling an increased sense of calm and greater connection with their bodies, which appeared to facilitate their ability to withstand and recover from cancer treatment. This finding is consistent with earlier research, which indicates that qigong can have positive impacts on affect and subjective well-being (Johansson & Hassmén, 2013). Qigong has been found to help balance stress levels and increase feelings of calm and relaxation (Posadzki, 2010) and improve mood for those undergoing cancer treatment (Oh et al., 2010).

Participants also reported feelings of increased energy and attributed illness recovery to the mind-in-body practice of qigong. Some participants attributed their entire recovery to the impacts of qigong. Previous studies have indicated that qigong can decrease stress (Marigliano et al., 2012) and contribute to cancer survival rates (Oh, Butow, Mullan, Clarke, et al., 2012). Research suggests that qigong may improve cancer-related quality of life (Chan et al., 2012; Chen et al., 2013; Chen & Yeung, 2002; Klein et al., 2016; Oh et al., 2010; Oh, Butow, Mullan, Hale, et al., 2012).



## **Domain C: Post Treatment and “Getting Back to the New Normal”**

In the current research, qigong helped support connections for women in their bodies, specifically to areas of women’s bodies that had been changed in ways that caused them to feel foreign or provoked fear and/or anxiety as a result of undergoing cancer treatment. Existing literature shows that it is common for women to experience unwanted changes in their bodies as a result of cancer treatment (Collins et al., 2011; Rasmussen, Hansen, & Elverdam, 2010). Research has shown that distorted body image following cancer treatment can be common and lead to greater psychological impacts following treatment, particularly among women with internalized gender roles (Boquiren et al., 2013). Furthermore, changes in body image following cancer treatment may have negative impacts on women’s perception of their social acceptance (Brunet et al., 2013).

Results of this study show that even when participants’ reentry and long-term survivorship experiences varied, they expressed and shared in the experience of empowerment and ability to embrace life. Research has shown that women have experienced an increase sense of self-empowerment in response to having lived with cancer (Hulett et al., 2015) and can develop increased feelings of gratitude for life and loved ones as life takes on new meaning during and after cancer (NCI, 2014). For some, cancer can result in personal growth for survivors and their families (Remen, 2008). At the time of the interviews, research participants expressed a deep sense of gratitude for their qigong practice, support and healing provided by qigong masters, and the love of family and friends.

In contrast to feeling grateful or empowered in relation to embracing life after cancer, research suggests that for some, a sense of guilt can prevail during survivorship (NCI, 2015). Depression, grief, anxiety, anger, and fear of cancer recurrence are also commonly experienced following cancer remission (Fallowfield & Jenkins, 2015, National Cancer Institute, 2014).

Research suggests that it is becoming more common for cancer survivors to address fears of recurrence with the use of complimentary and integrative health practices (Frenkel et al. , 2015).

Evidence suggests that older and younger women experience similar hardships in general in regard to cancer treatment, including impacts on physical functioning, emotional wellness, cognitive impairment, depression, and lack of social support (Kurtz & Dufour, 2002). However, research has also shown that older women, when compared to younger women, tend to have less extensive social support networks and less family support as they frequently live longer than males and may have greater challenges adjusting to psychosocial changes (Kurtz & Dufour, 2002). Younger women can have different challenges coping with cancer when compared to older women as younger women may have different life concerns (Ahmad et al., 2015). Age is an important consideration in cancer survivorship, but while variations in age were present among the participants, differing experiences among women in relation to age did not emerge in the themes of this research.

### **Limitations**

Interpretative Phenomenological Analysis seeks to understand the meaning making of small and typically homogeneous groups. Therefore, the findings of this research are limited to that specific area of focus rather than being generalizable to a broader population. The scope of this study included women with any form of cancer at any phase of survivorship. The inclusion of a broad spectrum of cancer phases and diagnosis creates a limitation in understanding how women make meaning at a specific stage of cancer, phase of survivorship, or in relation to a type of cancer.

The data included in this research consisted of individual and published interviews. The methods of data collection posed limitations to the research question. While the participants shared experiences directly related to qigong and having lived with cancer, only those who

participated in the individual interviews with the co-researcher responded directly to the established open-ended research question. The inconsistent nature of data collection is a limitation in relation to the credibility or trustworthiness of the results. Since it was not possible to engage with participants whose responses appeared in the published interviews, the process of member checking occurred only among the participants who had completed the individual interviews with the co-researcher. This dynamic also presents a limitation when considering the credibility or trustworthiness of the themes.

Given the inability to interact with participants in the published interviews, much of the participant demographic information was unknown, as were other forms of detailed context of the participants' backgrounds. This omission created additional barriers to understanding the context of the participants – for example how race, age, ethnicity, religion and/or sexuality, and privilege may have intersected with the meaning making of living with cancer and engaging in qigong practices. Therefore, the results of the research are limited in this capacity.

Furthermore, the researcher's own experience and understanding may have influenced the research findings; therefore, the findings represent only one of many possible interpretations. While the researcher engaged in reflexive practices, reflexivity may have been limited because the researcher did not engage regularly with a team of peer consultants to challenge assumptions or self-understandings. Additionally, the themes represented in this research may have been influenced by the choice women made to voluntarily share their experiences; different themes may have emerged among women who were less comfortable sharing their experiences with cancer.

### **Implications for Clinical Practice and Research**

Research has shown that, in general, well researched complementary therapies in oncology treatment help cancer survivors live more comfortably (Johnson, 2016) and heal the

whole person rather than focusing solely on the disease (Remen, 2008). Despite implications regarding the efficacy of treating cancer through the practice of qigong, evidence for the use of qigong as a treatment remains inconclusive due to the lack of clinical trials with valid measures (Lee, Chen, et al., 2007). Literature suggests that further research in the area of psycho-oncology and qigong is warranted due to the fact that mind-in-body experiences related to qigong use are perceived as an important part of the healing process for women in the context of cancer survivorship, particularly during and after cancer treatment. “The investigation of some ‘invisible’ therapeutic components including qigong, other forms of distant healing, or intercessory prayer may inevitably challenge both the underlying philosophy and the methodology in [Randomized Control Trials (RTC)]” (Ai, 2003, p. 113). Furthermore, Kerr (2002) found gaps in biomedical research designs specific to the understanding between researchers and practitioners and that this lack of connection can oppose scientific efforts to assess alternative therapies such as qigong. Therefore, careful consideration should be given to the design of RCTs that include qigong due to the underlying methodological complexities (Ai, 2003) and ethnographic query should be incorporated into the research design process (Kerr, 2002).

Participants voiced that qigong helped them to manage the difficult physical impacts of cancer treatment, contributed to healthy psychosocial coping during cancer, and the supported the maintenance of physical and emotional wellness after cancer treatment. Indeed, the overall shared positive experience of qigong among these participants suggests further research investigation among women cancer survivors and their practice of qigong would be beneficial. Specifically, this study sheds light on a neglected area of research: how mind-in-body practices such as qigong can help to support and empower women’s relationship with their bodies, including connection with areas of their body that may have become disfigured or altered as a

result of cancer treatment. Additional research is needed to further develop support for women as they engage with the process of connecting and relating to their bodies after cancer treatment. Furthermore, developing ways to effectively address body image discomfort in women could have positive impacts in other phases of cancer, such as avoidance of routine cancer screening.

Research findings indicated that qigong can assist in coping with cancer. Further research in the area of how qigong may impact women's experience of coping with cancer side effects is warranted. Given that cancer side effects can look very similar to symptoms of depression, additional research in the area of qigong, and the emotional health of women living with cancer, can bring insight into how to further support women's emotional wellbeing throughout all phases of cancer survivorship. Additional research to further understand how qigong may influence the meaning of living with cancer would be beneficial in creating more pathways to understanding women's experiences.

Racial and economic disparities have been reported in the overall population's access of complementary and alternative health practices (Clarke et al., 2015). Research has indicated that white, well-educated women are more likely to engage in integrative complementary treatments, as compared to women with less education and women of color (Fouladbakhsh & Stommel, 2010). Greater access to supportive and psychosocial resources, cancer treatment, and opportunities to participate in research need to be made more available to minority groups (Guidry et al., 2005); therefore, inclusivity of diverse populations is an important component on which future studies should focus in order to create pathways to improve cancer survivorship.

Given these findings, clinicians working with women cancer survivors should become familiar with integrative approaches, such as qigong, and consider this in their treatment and support for women coping with cancer. Consideration for complimentary approaches such as qigong can offer care, not only for the physical disease, but for the whole person. Through

increasing our understanding in the area of complimentary and integrative care, clinicians can more readily provide interventions that meet the unique needs of each person in various areas impacted by cancer, such as spirituality, sexuality, emotional wellness, relationships, and physical health. By increasing our understanding of how complimentary and integrative approaches can support women in their journey during and after cancer, clinicians create more inclusive pathways to wellness and survival.

### **Conclusion**

Complementary and integrative approaches to cancer care are becoming more common in the United States. Qigong, a vital component of Traditional Chinese Medicine, has been well researched in China, yet is under examined in the United States., where research has suggested that the lack of clinical trials has left many questions about the efficacy of qigong in cancer care unaddressed. The current study suggests that mind-in-body experiences related to qigong practice can act as an important part of the healing process for women in the context of cancer survivorship, particularly during and after cancer treatment. Qigong use helped to mitigate the difficult physical impacts of cancer treatment, contribute to healthy psychosocial coping during cancer, and maintain physical and emotional wellness after cancer treatment. Results indicate that qigong is meaningful for women cancer survivors and can help women engage more deeply in mind-in-body healing, developing relationship with areas of their body that have been changed as a result of undergoing cancer treatment. Also within the participant narratives was the assertion that qigong supported women's ability to cope with pain and suffering during cancer treatment, created a pathway to feeling more empowered in their bodies, and contributed to feelings of calm, peace, and gratitude. Some women shared in a greater capacity to embrace life and attributed their ability to heal from cancer directly to qigong energy healing provided by

their qigong master. As such, the conclusions of this research suggest that qigong warrants additional consideration and further research as a positive influence for women cancer survivors.

## References

- Abbott, R., & Lavretsky, H. (2013). Tai chi and qigong for the treatment and prevention of mental disorders. *Psychiatric Clinics of North America*, 36(1), 109–119. doi:10.1016/j.psc.2013.01.011
- Ahmad, S., Fergus, K., & McCarthy, M. (2015). Psychosocial issues experienced by young women with breast cancer: the minority group with the majority of need. *Current Opinion in Supportive and Palliative Care*, 9(3), 271–278.
- Ai, A. L. (2003). Assessing mental health in clinical study on qigong: Between scientific investigation and holistic perspectives. *Seminars in Integrative Medicine*, 1(2), 112–121. doi:10.1016/S1543-1150(03)00022-X
- Alberg, A., & Singh, S. (2001). Epidemiology of breast cancer in older women. *Drugs and Aging*, 18(10), 761–772.
- American Cancer Society. (2016). *Cancer facts and figures 2016*. Atlanta (GA): American Cancer Society. <http://www.cancer.org/acs/groups/content/@research/documents/document/acspc-047079.pdf>
- Andreu, Y., Galdón, M., Durá, E., Martínez, P., Pérez, S., & Murgui, S. (2012). A longitudinal study of psychosocial distress in breast cancer: prevalence and risk factors. *Psychology and Health*, 27(1), 72–87.
- Arnold, M., Jiang, L., Stefanick, M. L., Johnson, K. C., Lane, D. S., LeBlanc, E. S., Prentice, R., Rohan, T. E., Snively, B. M., Vitolins, M., Zaslavsky, O., Soerjomataram, I., & Anton-Culver, H. (2016). Duration of adulthood overweight, obesity, and cancer risk in the women's health initiative: A longitudinal study from the United States. *PLoS Med.*, 13(8):e1002081. doi: 10.1371/journal.pmed.1002081.
- Astin, J. A., Berman, B. M., Bausell, B., Lee, W. L., Hochberg, M., & Forsys, K. L. (2003). The efficacy of mindfulness meditation plus qigong movement therapy in the treatment of fibromyalgia: A randomized controlled trial. *Journal of Rheumatology*, 30(10), 2257–2262.
- Bai, Z., Guan, Z., Fan, Y., Liu, C., Yang, K., Ma, B., & Wu, B. (2015). The effects of qigong for adults with chronic pain: Systematic review and meta-analysis. *The American Journal of Chinese Medicine*, 43(8), 1525–1539.
- Balducci, L., Extermann, M., & Carreca, I. (2001). Management of breast cancer in the older woman. *Cancer Control*, 8(5), 430–441.
- Boquiren, V., Esplen, M., Wong, J., Toner, B., & Warner, E. (2013). Exploring the influence of gender-role socialization and objectified body consciousness on body image disturbance in breast cancer survivors. *Psycho-Oncology*, 22, 2177–2185.



- Bottomley, J. (2004). Qi Gong for health and healing. In C. M. Davis (Ed.), *Complementary therapies in rehabilitation* (pp. 253–282). Thorofare, New Jersey: Slack.
- Bower, J. E. (2014). Cancer-related fatigue: Mechanisms and treatment implications. *Nature Reviews Clinical Oncology*, 11, 597–609.
- Bower, J. E., Ganz, P., Katherine, D., Rowland, J., Meyerowitz, B., & Belin, T. (2000). Fatigue in breast cancer survivors: Occurrence, correlates, and impact on quality of life. *Journal of Clinical Oncology*, 18, 743–753.
- Braun, V., & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. ISSN1478-0887 Available from: <http://eprints.uwe.ac.uk/11735>
- Brocki, J. & Weardon, A. (2006) A critical evaluation of the use of Interpretative Phenomenological Analysis (IPA) in health psychology. *Psychology and Health*, 21(1), 87–108.
- Brunet, J., Sabiston, C. M., & Burke, S. (2013). Surviving breast cancer: Women's experiences with their changed bodies. *Body Image*, 10(3), 344–351.
- Center for Disease Control and Prevention (CDC). (2013). Leading causes of death in females. [http://www.cdc.gov/women/lcod/2013/womenall\\_2013.pdf](http://www.cdc.gov/women/lcod/2013/womenall_2013.pdf)
- Center for Disease Control and Prevention (CDC). (2015). U.S. cancer statistics working group. Atlanta (GA): Department of Health and Human Services, Centers for Disease Control and Prevention, and National Cancer Institution. <http://www.cdc.gov/cancer/dcpc/data/women.html>
- Chan, A. W. K., Lee, A., Suen, L. K. P., & Tam, W. W. S. (2010). Effectiveness of a Tai chi Qigong program in promoting health-related quality of life and perceived social support in chronic obstructive pulmonary disease client. *Quality of Life Research*, 19, 653–664. doi:10.1007/s11136-010-9632-6
- Chan, C. L. W., Wang, C., Ho, R. T. H., Ng, S., Chan, J. S. M., Ziea, E. T. C., & Wong, V. C. W. (2012). A systematic review of the effectiveness of qigong exercise in supportive cancer care. *Supportive Care in Cancer*, 20(6), 1121–1133. doi:10.1007/s00520-011-1378-3
- Chaoul, A., Millbury, K., Sood, A., Prinsloo, S., & Cohen, L. (2014). Mind-body practices in cancer care. *Current Oncology Report*, 16(417), 1–7.
- Chen, Z., Meng, Z., Milbury, K., Bei, W., Zhang, Y., Thornton, B., Liao, Z., Wei, Q., Chen, J, Goo, X., Liu, L., McQuade, J., Kirschbaum, C., & Cohen, L. (2013). Qigong improves quality of life in women undergoing radiotherapy for breast cancer. *Cancer*, 119(9), 1690–1698. doi:10.1002/cncr.27904

- Chen, K., & Yeung, R. (2002). Exploratory studies of qigong therapy for cancer in China. *Integrative Cancer Therapies*, 1(4), 345–370.
- Chrisman, J. A., Christopher, J. C., & Lichtenstein, S. J. (2009). Qigong as a mindfulness practice for counseling students. *Journal of Humanistic Psychology*, 49(2), 236–257. doi:10.1177/0022167808327750
- Clarke, T. C., Black, L. I., Stussman, B. J., Barnes, P. M., & Nahin, R. L. (2015). Trends in the use of complementary health approaches among adults: United States, 2002–2012. *National Health Statistics Reports*; No 79. Hyattsville, MD: National Center for Health Statistics.
- Cohen, L., Zhen, C., Arun, B., Zhimin, S., Dryden, M., Linhui, X., Le-Petross, C., Dogan, B., McKenna, B. J., Markman, M., & Babiera, G. (2010). External qigong therapy for women with breast cancer prior to surgery. *Integrative Cancer Therapies*, 9(4), 348–353. doi:10.1177/1534735410387424
- Collins, K., Liu, Y., Schootman, M., Aft, R., Yan, Y., Dean, G., & Jeffe, D. (2011). Effects of breast cancer surgery and surgical side effects on body image over time. *Breast Cancer Research and Treatment*, 126, 167–176.
- Creswell, J. (2013). *Qualitative inquiry & research design: Choosing among five approaches*, 3rd Edition. Thousand Oaks, California: Sage Publications.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The Sage handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.
- Diehl, V. (2009). The bridge between patient and doctor: the shift from CAM to integrative medicine. *American Society of Hematology*, 1, 320–325.
- Elkins, G., Fisher, W., & Johnson, A. (2010). Mind-body therapies in integrative oncology. *Current Treatment Options Oncology*, 3(4), 128–140. doi:10.1007/s11864-010-0129-x.
- Fallowfield, L., & Jenkins, V. (2015). Psychological/survivorship in breast cancer. Are we doing better? *Journal of the National Cancer Institute*, 107(1), 1–5.
- Fouladbakhsh, J., & Stommel, M. (2008). Comparative analysis of CAM use in the U.S. cancer and noncancer populations. *Journal of Complementary and Integrative Medicine*, 5(1), 1–26.
- Fouladbakhsh, J., & Stommel, M. (2010). Gender, symptom experience, and use of complementary and alternative medicine practices among cancer survivors in the U.S. cancer population, *Oncology Nursing Forum*, 37(1), E7–E15.
- Frenkel, M., Sierpina, V., & Sapire, K. (2015). Effects of complementary and integrative medicine on cancer survivorship. *Current Oncology Reports*, 17, 21. <https://doi.org/10.1007/s11912-015-0445-1>

- Gadamer, H. G. (1976). *Philosophical hermeneutics*. Berkeley: University of California Press.
- Gennari, R., & Audisio, R. (2008). Breast cancer in elderly women: Optimizing the treatment. *Breast Cancer Research Treatment*, 110, 199–209.
- Green, C., Hart-Johnson, T., & Loeffler, D. (2011). Cancer-related chronic pain examining quality of life in diverse cancer survivors. *Cancer*, 5, 1994–2002.
- Griffith, J. M., Hasley, J. P., Liu, H., Severn, D. G., Conner, L. H., & Adler, L. E. (2008). Qigong stress reduction in hospital staff. *Journal of Alternative Complementary Medicine*, 14, 939–945.
- Grodin, M., Piwowarczyk, L., Fulker, D., Bazazi, A., & Saper, R. (2008). Treating survivors of torture and refugee trauma: A preliminary case series using qigong and T'ai chi. *Journal of Alternative and Complementary Medicine*, 14, 801–806.
- Gu, M. (2012). Heal mind and body with qigong. *Share Guide*. Retrieved from <http://www.shareguide.com/HealMindBody.html>
- Guidry, J., Torrence, W., & Herbelin, S. (2005). Closing the divide: Diverse populations and cancer survivorship. *Cancer*, 104, 2577–2583.
- Heidegger, M. (1962). *Being and time* (J. Macquarrie, & E. Robinson, Trans.). New York: Harper and Row.
- Hofman, M., Ryana, J., Figueroa-Moseley, C., Jean-Pierrea, P., & Morrow, G. (2007). Cancer-related fatigue: The scale of the problem. *The Society of Translational Oncology*, 12, 4–10.
- Howlader, N., Noone, A. M., Krapcho, M., Miller, D., Bishop, K., Altekruse, S. F., Kosary, C. L., Yu, M., Ruhl, J., Tatalovich, Z., Mariotto, A., Lewis, D. R., Chen, H. S., Feuer, E. J., & Cronin, K. A. (Eds). SEER Cancer Statistics Review, 1975-2013, *National Cancer Institute*. Bethesda, MD, [http://seer.cancer.gov/csr/1975\\_2013/](http://seer.cancer.gov/csr/1975_2013/), based on November 2015 SEER data submission, posted to the SEER web site, April 2016.
- Hulett, J., Armer, J., Stewart, B., & Wanchai, A. (2015). Perspectives of the breast cancer survivorship continuum: Diagnosis through 30 months post-treatment. *Journal of Personalized Medicine*, 5(2), 174–190. doi:10.3390/jpm5020174
- Hutchinson, L., Unger, J., Crowley, J., Coltman, C., & Albain, K. (2014). Underrepresentation of patients 65 years of age or older in cancer-treatment trials. *The New England Journal of Medicine*, 341(27), 2061–2066.
- Jacobsen, P. B., & Andrykowski, M. A. (2015). Tertiary prevention in cancer care: Understanding and addressing the psychological dimensions of cancer during the active treatment period. *American Psychologist*, 70, 134–145. <http://dx.doi.org/10.1037/a0036513>

- Jahnke R., Larkey, L., Rogers, C., Etnier, J., & Lin, F. (2010). A comprehensive review of health benefits of qigong and tai chi. *American Journal of Health Promotion*, 24, 1–25.
- Johansson, M., & Hassmén, P. (2013). Affective responses to qigong: A pilot study of regular practitioners. *Journal of Bodywork & Movement Therapies*, 17(2), 177–184. doi:10.1016/j.jbmt.2012.07.011
- Johansson, M., Hassmén, P., & Jouper, J. (2008). Acute effects of qigong exercise on mood and anxiety. *International Journal of Stress Management*, 15(2), 199–207. doi:10.1037/1072-5245.15.2.199
- Johnson, A. (2016). Complementary medicine and cancer care. *A Woman's Health*. <http://a.womanshealth.com/complementary-medicine-and-cancer-care/>
- Johnson, J. (2005). *Chinese medical qigong therapy, Vol. 2*. Monteray, CA: International Institute of Medical Qigong.
- Kemeney, M., Peterson, B., Kornblith, A., Muss, H., Wheeler, J., Levine, E., Bartlett, N., Fleming, G., & Cohen, H. (2003). Barriers to clinical trial participation by older women with breast cancer. *Journal of Clinical Oncology*, 21, 2268–2275.
- Kemp, C. A. (2004). Qigong as a therapeutic intervention with older adults. *Journal of Holistic Nursing*, 22(4), 351–373. doi:10.1177/0898010104269313
- Kerr, C. (2002). Translating “Mind-in-Body”: Two Models of Patient Experience Underlying a Randomized Controlled Trial of Qigong. *Culture, Medicine and Psychiatry*, 26(4), 419–447.
- Kelsey, J. Gammon, M., & John, E. (1993). Reproductive factors and breast cancer. *Epidemiologic Reviews*, 15(1), 36–47, <https://doi.org/10.1093/oxfordjournals.epirev.a036115>
- Klein, P. J., Schneider, R., & Rhoads, C. J. (2016). Qigong in cancer care: A systematic review and construct analysis of Qigong therapy. *Support. Care Cancer*, 24, 3209–3222.
- Knols, R., Aaronson, N., Uebelhart, D., Fransen, J., & Aufdemkampe, G. (2005). Physical exercise in cancer patients during and after medical treatment: A systematic review of randomized and controlled clinical trials. *Journal of Clinical Oncology*, 23(16), 3830–3842.
- Kurtz, J., & Dufour, P. (2002). Strategies for Improving Quality of Life in Older Patients with Metastatic Breast Cancer. *Drugs Aging*, 19(980), 605–622.
- Larkin, M., & Thompson, A. (2012) Interpretative phenomenological analysis. in A. Thompson & D. Harper (Eds). *Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners*. (pp. 99–116). John Wiley & Sons: Oxford. doi:10.1002/9781119973249

- Laverty, S. (2003). Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. *International Journal of Qualitative Methods*, 2(3), 1–29.
- Lee, M. S., Chen, K., Sancier, K., & Ernst, E. (2007). Qigong for cancer treatment: A systematic review of controlled clinical trials. *Acta Oncologica*, 46(6), 717–722.
- Lee, M. S., Pittler, M. H., & Ernst, E. (2007). External qigong for pain conditions: A systematic review of randomized clinical trials. *Journal of Pain*, 8(11), 827–831. doi:10.1016/j.jpain.2007.05.016
- Ling, Y. (2013). Traditional Chinese medicine in the treatment of symptoms in patients with advanced cancer. *Analysis of Palliative Medicine*, 2(3), 141–152.
- Liu, T., & Qiang, X. (2013). (Eds.). *Chinese medical qigong*. London: United Kingdom: Singing Dragon.
- Liu, X., Miller, Y. D., Burton, N. W., Chang, J., & Brown, W. J. (2011). Qi-gong mind–body therapy and diabetes control. *American Journal of Preventive Medicine*, 41(2), 152–158. doi:10.1016/j.amepre.2011.04.007
- Lortet-Tieulent, J., Goding Sauer, A., Siegel, R. L., Miller, K. D., Islami, F., Fedewa, S. A., Jacobs, E. J., & Jemal, A. (2016). State-level cancer mortality attributable to cigarette smoking in the United States. *JAMA Intern Med*. doi: 10.1001/jamainternmed.2016.6530. [Epub ahead of print]
- Lynch, M., Sawynok, J., Hiew, C., & Marcon, D. (2012). A randomized controlled trial of qigong for fibromyalgia. *Arthritis Research & Therapy*, 14(4), R178. doi:10.1186/ar3931
- Marigliano, A., Ponzio, E., Berti, S., Scotte, L., Barbadoro, P., & Minelli, A. (2012). Effects of qi-gong training on self-rated symptoms and salivary biomarkers of stress in healthy elderly people: Preliminary results. *European Journal of Integrative Medicine*, 4, 152–153. doi:10.1016/j.eujim.2012.07.830
- MD Anderson Center. (2014) Cancer survivorship: possible side effects of cancer treatment. University of Texas. Retrieved from <http://www.mdanderson.org/patient-and-cancer-information/cancer-information/cancer-topics/survivorship/side-effects-of-cancer-treatment/index.html>
- Mehnert, A., & Koch U. (2008). Psychological comorbidity and health-related quality of life and its association with awareness, utilization, and need for psychosocial support in a cancer register-based sample of long-term breast cancer survivors. *Journal of Psychosomatic Research*, 64(4), 383–391.
- Micollier, E. (1999). Control and release of emotions in Qigong health practices. *China Perspectives*, 24, 22–31.

- Miller, K., & Massie, M. (2006). Depression and anxiety. *Cancer Journal*, 12(5), 388–397.
- Mills, N., Allen, J., & Carey-Morgan, S. (2000). Does tai chi/qi gong help patients with multiple sclerosis? *Journal of Bodywork and Movement Therapies*, 4(1), 39–48. doi:10.1054/jbmt.1999.0139
- Monti, D., Sulfan, M., & Peterson, C. (2008). Potential role of mind-body therapies in cancer survivorship. *Cancer Supplement*, 112(11), 2607–2616.
- Moseholm, E., Rydahl-Hansen, S., Overgaard, D., Wengel, H., Frederiksen, R., Brandt, M., & Lindhardt, B. (2016). Health-related quality of life, anxiety and depression in the diagnostic phase of suspected cancer, and the influence of diagnosis. *Health and Quality of Life Outcomes*, 14(80). doi:10.1186/s12955-016-0484-9
- National Cancer Institute. (Sept. 24<sup>th</sup>, 2014). National Cancer Institute Fact Sheet. Retrieved from <http://www.cancer.gov/cancertopics/factsheet/detection/probability-breast-cancer>
- National Center for Complementary and Integrative Health (NCCIH), (2012) NCCAM Publication No. D347, Updated June 2016. Available at URL: <https://nccih.nih.gov/health/integrative-health#types>
- National Center for Health Statistics. (1999). *Health and Aging Chartbook*. Hyattsville, (MD): MD.
- Oh, B., Butow, P., Mullan, B., Clarke, S., Beale, P., Pavlakis, Kothe, N., Lom, L., & Rosenthal, D. (2010). Impact of medical qigong on quality of life, fatigue, mood and inflammation in cancer patients: A randomized controlled trial. *Annals of Oncology*, 21(3), 608–614. doi:10.1093/annonc/mdp479
- Oh, B., Butow, P. N., Mullan, B. A., Clarke, S. J., Beale, P. J., Pavlakis, N. & Vardy, J. (2012). Effect of medical qigong on cognitive function, quality of life, and a biomarker of inflammation in cancer patients: A randomized controlled trial. *Supportive Care in Cancer*, 20(6), 1235–1242. doi:10.1007/s00520-011-1209-6
- Oh, B., Butow, P., Mullan, B., Hale, A., Lee, M. S., Guo, X., & Clarke, S. (2012). A critical review of the effects of medical qigong on quality of life, immune function, and survival in cancer patients. *Integrative Cancer Therapies*, 11(2), 101–110. doi:10.1177/1534735411413268
- Palmer, D. (2007). *Qigong fever*. New York, NY: Columbia University Press.
- Patel-Kerai, G., Harcourt, D., Rumsey, N., Naqvi, H., & White, P. (2016). The psychosocial experiences of breast cancer amongst Black, South Asian and White survivors: do differences exist between ethnic groups? *Psycho-oncology*, 2. doi:10.1002/pon.4187

- Pelusi, J. (2006). Sexuality and body image: Research on breast cancer survivor. *Cancer Nursing*, 29(2), 32–38.
- Peres, L. C., Bandera, E. V., Qin, B., Guertin, K. A., Shivappa, N., Hebert, J. R., Abbott, S. E., Alberg, A. J., Barnholtz-Sloan, J., Bondy, M., Cote, M. L., Funkhouser, E., Moorman, P. G., Peters, E. S., Schwartz, A. G., Terry, P. D., Camacho, F., Wang, F., & Schildkraut, J. M. (2016). Dietary inflammatory index and risk of epithelial ovarian cancer in African American women. *International Journal of Cancer*. doi:10.1002/ijc.30467.
- Posadzki, P. (2010). The psychology of qi gong: A qualitative study. *Complementary Health Practice Review*, 15(2), 84–97. doi:10.1177/1533210110387019
- Posadzki, P., Parekh, S., & Glass, N. (2010). Yoga and qigong in the psychological prevention of mental health disorders: A conceptual synthesis. *Chinese Journal of Integrated Medicine*, 16(1): 80–86.
- Rasmussen, D. M., Hansen, H. P., & Elverdam, B. (2010). How cancer survivors experience their changed body encountering others. *European Journal of Oncology Nursing*, 14, 154–159.
- Remen, R. (2008). Practicing a medicine of the whole person: An opportunity for healing. *Hematology/Oncology Clinics North America*, 22(4), 767–773.
- Robb, C., Haley, W., Balducci, L., Extermann, M., Perkins, E., Small, B., & Mortimer, J. (2007). Impact of breast cancer survivorship on quality of life in older women. *Critical Reviews in Oncology/Hematology*, 62, 84–91.
- Sagli, G. (2008). Learning and experiencing Chinese qigong in Norway. *East Asian Science, Technology and Society: An International Journal*, 2(4), 545–566.
- Sherwood, P., Donovan, H., Rosenzweig, M., Hamilton, R., & Bender, C. M. (2008). A house of cards: The impact of treatment costs on women with breast and ovarian cancer. *Cancer Nursing*, 31(6), 470–477.
- Shih, Tzu Kuo. (1994). *Qi gong therapy: The Chinese Art of Healing With Energy*. Station Hill Press. Barrytown, NY.
- Skoglund, L., & Jansson, E. (2007). Qigong reduces stress in computer operators. *Complementary Therapies in Clinical Practice*, 13(2), 78–84. doi:10.1016/j.ctcp.2006.09.003
- Smith, J. A. (1996). Beyond the divide between cognition and discourse: Using Interpretative phenomenological analysis in health psychology. *Psychology & Health*, 11, 261–271.
- Smith, J., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. Thousand Oaks, California: Sage Publications.

- Spielgelberg, H. (1975). *Doing phenomenology*. The Hague, The Netherlands: Martinus Nijhoff.
- Stanton, A., Danoff-Burg, S., Cameron, C., Bishop, M., Collins, C., Kirk, S. Sworowski, L., & Twillman, R. (2000). Emotionally expressive coping predicts psychological and physical adjustment to breast cancer. *Journal of Consulting and Clinical Psychology*, 68(5), 875–882.
- Stanton, A., Rowland, J., & Ganz, P. (2015). Life after diagnosis and treatment of cancer in adulthood: Contributions from psychosocial oncology research. *American Psychologist*, 70(2), 159–174. <http://dx.doi.org/10.1037/a0037875>
- Sun, G. (2009). The effects of qi gong therapy on glucose management in patients with type 2 diabetes. *Explore: The Journal of Science and Healing*, 5(3), 158. doi:10.1016/j.explore.2009.03.039
- Taber, J., Klein, W., Suls, J., & Ferrer, R. (2016). Lay awareness of the relationship between age and cancer risk. *Annals of Behavioral Medicine*, 51(2), 1–12. doi:10.1007/s12160-016-9845-1.
- Thomas, D. (2017). Feedback from research participants: Are member checks useful in qualitative research? *Qualitative Research in Psychology*, 14(1), 23–41.
- Tindle, H., Davis, R., Phillips, R., & Eisenberg, D. (2005). Trends in use of complementary and alternative medicine by US adults: 1997-2002. *Alternative Therapies, Health and Medicine*, 11, 42–49.
- Traditional Chinese Medicine World Foundation. (2017). What is Qigong? [https:// www.tcmworld.org/qigong/](https://www.tcmworld.org/qigong/)
- Trijsburg, R. W., Van Knippenberg, F. C. E., Rijpma, S. E. (1992). Effects of psychological treatment on cancer patients: A critical review. *Psychosomatic Medicine*, 54, 489–517.
- Tsang, H. W., Cheung, L., & Lak, D. C. (2002). Qigong as a psychosocial intervention for depressed elderly with chronic physical illnesses. *International Journal of Geriatric Psychiatry*, 17(12), 1146–1154.
- Tsang, H. W., Mok, C. K., Au Yeung, Y. T., & Chan, S. Y. (2003). The effect of Qigong on general and psychosocial health of elderly with chronic physical illnesses: A randomized clinical trial. *International Journal of Geriatric Psychiatry*, 18(5), 441–449.
- Tsang, H. W. H., & Fung, K. M. T. (2008). A review on neurobiological and psychological mechanisms underlying the anti-depressive effect of qigong exercise. *Journal of Health Psychology*, 13(7), 857–863. doi:10.1177/1359105308095057
- Tsang, H. W. H., Fung, K. M. T., Chan, A. S. M., Lee, G., & Chan, F. (2006). Effect of a qigong exercise programme on elderly with depression. *International Journal of Geriatric Psychiatry*, 21(9), 890–897. doi:10.1002/gps.1582



- Twite, K. (2007). Neoplasia: A disorder of proliferation and differentiation. In C.M. Porth (Ed.), *Essentials of Pathophysiology: Concepts of Altered Health States, Second Edition* (pp.79–101). Philadelphia: Lippincott Williams & Wilkins.
- Vilhauer, R. (2008). A qualitative study of the experiences of women with metastatic breast cancer. *Palliative and Supportive Care*, 6(3), 249–258.
- Walters, R. (1993). *Options: The alternative cancer therapy book*. Honesdale, PA: Paragon Press.
- Wang, C. W., Chan C. L., Ho, R., Tsang H., Chan C. H., & Ng, S. (2013). The effect of qigong on depressive and anxiety symptoms: A systematic review and meta-analysis of randomized controlled trials. *Evidence Based Complementary Alternative Medicine*, 71, 60–94. doi:10.1155/2013/716094.
- Wieneke, M., & Dienst, E. (1995). Neuropsychological assessment of cognitive functioning following chemotherapy for breast cancer. *Psycho-oncology*, 4, 61–66.
- World Health Organization. (2001). *Mental health: New understanding, New Hope*. Geneva: WHO.
- World Health Organization (WHO). (2016). Health topics: Cancer. <http://www.who.int/topics/cancer/en/>
- Xin, L., Miller, Y. D., & Brown, W. J. (2007). A qualitative review of the role of qigong in the management of diabetes. *Journal of Alternative Complementary Medicine*, 13, 427–443.
- Yost, T. L., & Taylor, A. G. (2013). Qigong as a novel intervention for service members with mild traumatic brain injury. *Explore: The Journal of Science and Healing*, 9(3), 142–149. doi:10.1016/j.explore.2013.02

## Appendix A

### Code Cloud



## Appendix B

### Code Applications

	Initial'Diagr	'Emotional'	"Anger	"Depressio	"Fear	"Overwhel	'Mind'in'Bo	Cancer'Trea	
Initial'Diagnosis		4	1	2	9	14			9
'Emotional'	4				3	1			
"Anger	1								
"Depression	2								
"Fear	9	3							2
"Overwhelm	14	1							4
'Mind'in'Body									
Cancer'Treat	9				2	4			
'Engaging'in	4			2		1	1		92
"Mind'in'Bo	1	1			1	1	1		71
"Pain'and'S	7			1		2			30
PostJTreatm	7				2	4			10
'Embracing	6					2			6
"Mind'in'Bo	3					1	1		8
'Gratitude'	2								2
Totals	69	9	1	5	17	30	3		234

	Initial'Diagr	'Emotional'	"Anger	"Depressio	"Fear	"Overwhel	'Mind'in'Bo	Cancer'Trea	
Initial'Diagnosis		4	1	2	9	14			9
'Emotional'	4				3	1			
"Anger	1								
"Depression	2								
"Fear	9	3							2
"Overwhelm	14	1							4
'Mind'in'Body									
Cancer'Treat	9				2	4			
'Engaging'in	4			2		1	1		92
"Mind'in'Bo	1	1			1	1	1		71
"Pain'and'S	7			1		2			30
PostJTreatm	7				2	4			10
'Embracing	6					2			6
"Mind'in'Bo	3					1	1		8
'Gratitude'	2								2
Totals	69	9	1	5	17	30	3		234

## Appendix C

### Permissions




[Home](#)
[Create Account](#)
[Help](#)




**Title:** Using thematic analysis in psychology

**Author:** Virginia Braun, Victoria Clarke

**Publication:** Qualitative Research in Psychology

**Publisher:** Taylor & Francis

**Date:** Jan 1, 2006

Copyright © 2006 Routledge

[LOGIN](#)

If you're a [copyright.com](#) user, you can login to RightsLink using your copyright.com credentials. Already a [RightsLink user](#) or want to [learn more?](#)

#### Thesis/Dissertation Reuse Request

Taylor & Francis is pleased to offer reuses of its content for a thesis or dissertation free of charge contingent on resubmission of permission request if work is published.

[BACK](#)
[CLOSE WINDOW](#)

Copyright © 2017 [Copyright Clearance Center, Inc.](#) All Rights Reserved.  
[Privacy statement.](#) [Terms and Conditions.](#)  
 Comments? We would like to hear from you. E-mail us at [customer@copyright.com](mailto:customer@copyright.com)

## Appendix D

### Process Art



Qigong: Heavens and Earth  
Mixed Media-Wax, resin, oil pastels, paper.



Relationship to Cancer  
Mixed Media: Wax, resin, oil pastels, paper.





### Research Reflections

Mixed Media: Wax, resin, oil pastels, paper.

